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ORIGINAL ARTICLES.

THE THERAPEUTIC ACTION OF THE NATURAL MINERAL SPRINGS OF CRESSON UPON THE MUCOUS MEMBRANE OF THE NOSE AND THROAT.

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Read in Section of Ophthalmology, Otology and Laryngology of the American Medical Association, May, 1884.

During a short sojourn at Cresson Springs, last summer, I became acquainted with the mineral springs of the place; and having observed their therapeutic value on some persons staying there, I resolved to give the matter a thorough test. It was an easy matter to obtain a sufficient quantity of the waters for trial during the winter, and the following remarks will give a *resumé* of the results of numerous trials as well as a few hints as to the proper use of mineral waters in general.

The following analyses of the iron, alum and magnesia springs at Cresson, were made by Professor F. A. Genth, of the University of Pennsylvania, for the State Geological Survey, in 1875.

One gallon of 231 cubic inches contains:

	Iron Spring.	Alum Spring.
Sulphate of Ferric Oxide	= trace	= 33.38970 grains.
" Alumina	= 1.60466	= 21.20498 "
" Ferrous Oxide	= 23.47923	= 16.25273 "
" Magnesia	= 22.58007	= 27.69855 "
" Lime	= 48.91824	= 40.20179 "
" Lithia	= trace	= 0.04693 "
" Soda	= 1.64331	= 0.70398 "
" Potash	= 0.32405	= 0.42622 "
Chloride of Sodium	= 0.04063	= 0.02336 "
Bicarbonate of Iron	= 5.03471	= 3.74756 "
" Manganese	=	= trace "
" Lime	= 3.52946	= "
Phosphate of Lime	= 0.02914	= trace "
Silicic Acid	= 1.20832	= 1.86794 "
	108.39182	145.56374

	Magnesia Spring.
Sulphate of Lime	= 0.10912 grains.
Chloride of Magnesium	= 0.55962 "
" Calcium	= 1.30444 "
" Sodium	= 1.22974 "
Bicarbonate of Iron	= 0.01753 "
" Manganese	= trace "
" Magnesia	= 0.41434 "
" Lime	= 0.02252 "
" Soda	= 1.42582 "
" Potash	= 0.20671 "
Phosphate of Lime	= 0.00408 "
Alumina	= 0.00876 "
Silicic Acid	= 0.91455 "
Nitrous Acid	= trace "
Carbonic Acid (free)	= 0.66390 "
	6.88113 "

There are at Cresson three springs: One a very strong iron spring, which, according to the analyses made by the Pennsylvania State Survey, ranks with the best so-called steel springs of Europe; a ferruginous alum and a weak magnesia spring. These waters I used on a number of patients suffering from chronic catarrhal inflammation of the upper air passages, in the form of spray applied locally to the diseased mucous membrane and the iron and magnesia waters internally with proper regulation of the diet of the patients.

Thus I found that the ferric alum water had a decided tonic and stimulating effect in those cases of atrophic nasal catarrh, which were complicated with pharyngitis sicca and chronic laryngitis, and that the beneficial effect of the local applications was very soon apparent to the patient. In these cases selected for trial no other treatment was used, so that there should be no error possible in determining the therapeutic value of the application.

The iron water I found to have no very decided effect upon these cases, but to be of great value in cases of follicular pharyngitis and in the milder forms of hypertrophic nasal catarrh, as well as in cases of ordinary simple chronic laryngitis and bronchitis. The water is sufficiently alkaline to soften the secretions and to cleanse the mucous membrane.

The magnesia water locally applied gave no results whatever, and I very soon desisted in using it for topical applications, but found it a valuable adjuvant in the treatment of patients suffering from lythæmic inflammations of the mucous membranes of the upper air passages. In these cases the patient was directed to drink the water freely, and its slightly diuretic effect soon became apparent.

The iron spring also is somewhat diuretic in its action, but it is chiefly valuable as a tonic particularly in cases with feeble digestion.

The local applications were made in all these cases in the form of sprays, either with the hand atomizer or with the steam apparatus, and were not repeated oftener than once a day.

Artificially prepared solutions of iron and ferric alum which I used in a number of cases similar to those which were treated with the natural waters, did not have the same effect, and this fact strengthened my belief that it seems impossible to manufacture an artificial mineral water in the laboratory of the chemist which is equal in its value to that produced in Nature's laboratory.

Almost all the European authors on diseases of the lungs and upper air passages lay great stress upon the

value of the natural mineral waters in the treatment of these disorders, and advise their patients to go to one or the other of the many watering places on the continent. In America, on the other hand, although we have mineral springs of equal and even greater therapeutic value than are found in Europe, yet the medical profession at large does not seem to recognize the fact, and they are little patronized with the exception of a few, where, however, the waters form the least attractions, as for instance in Saratoga.

This may perhaps find an explanation in the fact that, in this country everything being free, the patients at these watering places are left to their own choice as to the quality and quantity of the water they are to drink, and are not in the least restricted as to their diet, which as a rule is either altogether insufficient in quality, or sumptuous beyond reason. In Europe, however, the effects of the different mineral springs are well known to every educated physician, and when he sends a case to a watering place it is not a random patient which perhaps he is anxious to get rid of for a time, but he selects that mineral spring which is most suitable for the disease from which the patient is suffering. At the springs there is also a physician appointed permanently by the company or State owning the ground, who has made a study of the therapeutic action of the mineral waters, and who directs every patient as to which of the waters, if there are more than one spring at the place, he is to drink or use, how much, and in what form, whether internally, by local applications, or in the form of baths, and finally gives careful directions as to diet and exercise compatible with the use of the mineral springs.

We cannot expect that change of air and the indiscriminate use of a mineral spring alone should produce these marvelous effects which we so often hear about as having been produced by this or that German spring unless we combine hygienic measures with our therapeutic agents. As soon as the medical profession and their patients realize this important fact, our valuable mineral springs will cease to be a mere pretext for our fashionable patients to spend a few weeks at a watering place, and will become what they ought to be to-day: valuable adjuncts in the treatment of most chronic diseases.

The mineral springs of Cresson, viewed from this standpoint, will, I have no doubt, soon be recognized as extremely valuable in the treatment of all catarrhal affections of the mucous membranes, which is enhanced by their situations and surroundings. They are located near the summit of the Alleghanies at an elevation of 2,300 feet above the level of the sea, and within a few miles of the celebrated Horse Shoe curve of the Pennsylvania railroad, thus affording a moderately high altitude with a moderately dry climate, one that is eminently suited for catarrhal diseases. The hotel accommodations are excellent and the place is free from many of the objectionable features of other more fashionable watering places, such as drinking saloons, gambling hells, race courses and the like, which aside from the bad moral effect must necessarily materially interfere with the needful rest free from excitement, so necessary with treatment of most chronic diseases.

Unfortunately I was not able to test the virtue of Cresson waters in the form of baths, but when we compare the analysis with that of other springs similar in their chemical constituents we will find that also in that form they must be valuable in many of the disorders due to nervous debility which so frequently show themselves in inflammation and neuroses of the larynx and nasal cavities. As a matter of course, springs of this kind properly used will exert a beneficial effect upon catarrhal inflammations of other portions of the mucous membrane, but as my line of work lies in the direction of laryngology and rhinology, I could not well investigate the therapeutic action of these waters further than I did, namely, upon the mucous membrane of the upper air passages.

SOME REMARKS ON THE FEEDING OF SCHOOL CHILDREN.

BY LOUIS W. ATLEE, M.D., PHILADELPHIA.

Read in Section on the Diseases of Children of the American Medical Association, May, 1884.

From the beginning of all things the weak have been subservient to the strong, both mentally and physically. That the vigor of its people goes to make the greatness of a state is well illustrated in the history of the Roman people, who lost their supremacy in proportion as they destroyed their once famous physical abilities by sensuous indulgences.

It behooves us to see that this coming generation is endowed with the bodily vigor to fight successfully the never-ceasing battle of life; for upon our shoulders is thrown this responsibility.

The subject to which I wish to draw your attention is one that of late has been most thoroughly sifted in England, where a remedy for the evil has been happily suggested. Every actively engaged practitioner in a large city, must have been struck by the number of children brought to his office, whose pale thin faces, but bright eyes, are so characteristic of active minds and bodies insufficiently nourished.

The daily life of these little ones will be found to be much as follows: After a breakfast comprised at most of a very little bread with some tea or coffee, off they go to school to exercise their quickly developing brains till two o'clock, with perhaps an intermission of one half-hour. During this long period of six hours' strain on their mental and physical powers (being often required to stand up during recitation), very few take any nourishment to sustain them, and if they take any, it will be some miserable trifle, such as cake or fruit. Thus is the health of our children broken, and if attention is not soon given to their worn out appearance or complainings, they will either sink under some sickness that in health would have been safely passed over, or the foundation will be laid for an existence made miserable by many ills.

I cannot do better than repeat the words of Sir Henry Peak, in the *Lancet* for Aug. 4, 1883: "The education system is not overworking children, but they are underfed. Do not reduce the lessons, but increase the quality and quantity of the food."

That good feeding is necessary for brain nutrition does not need to be demonstrated or even argued at length.

The brain is part of the body, and it must be evident that the position in which education places the brain of undeveloped children, is that of a highly exercised organ urgently requiring food and finding none or very little. These children are growing, and all or nearly all the food they eat is appropriated to the grosser and bulkier parts of the body to the starvation of the brain.

If the brains were not stimulated by intellectual work they would be left simply undeveloped. As it is, they struggle for food with the other organs of the body, and every part of the organism is reduced to a condition favorable to disease. Other things being equal, a growing child with a hungry brain is worse off both in mind and body than a dullard.

If the organ of mind was not at work it would not be so urgent in its demand for food, and even a poorly fed child might grow in body generally; but being mentally active and underfed, it can neither be healthy in brain or muscle.

This is a matter of great moment, and ought to be carefully considered by all who have the care of the young. Brain nutrition makes a larger demand on the supplies than general nutrition, and requires that its special needs receive immediate attention.

I have now fulfilled my intention, that of directing your attention to this important question, and sincerely hope that it may be the means of leading others, much more competent than myself, to give a thorough elucidation of this subject.

RAW FOOD EXTRACTS.

B. N. TOWLE, M.D., CHARLESTOWN, MASS.

Read in the Section on Hygiene of American Medical Association, May, 1884.

Molescott's dictum is suggestive, "Without phosphorus there is no thought;" so without nutrition there is no life.

Life may be defined as an aggregation of molecules possessing the properties of respiration, circulation and nutrition. Each of these properties being necessary to all forms of life, the perfection of that life relies upon the completeness of the conditions on which these properties depend. Either of these properties being imperfect or vitiated, the perfection of the organization is impaired, and the life jeopardized.

Pure air in abundance must be supplied. A perfect circulatory system to convey the pabulum to the remotest atom of the organization, and a fluid bearing on its bosom nutritive material suited to the wants of the most delicate tissues is a uniform necessity to health and vigor. From the food the blood is fed, and from the blood the various tissues are built up, therefore the blood of a healthy animal contains all the nutritive material necessary to the production of a perfect organization. If the blood is deficient in pabulum for any tissue, the organ to which that tissue belongs becomes disordered, and the whole system suffers from mal-nutrition and wasting disease, the unavoidable consequence.

Persons suffering from tubercular consumption or chronic disease of any of the vital organs, may be fed on the most nutritious food, and it may be prepared in the most approved ways known to the culinary art, and taken in quanties sufficient to nourish them, and yet they grow thin continually with food in their stomachs, because of a want of power to digest certain elements of it, as starch, sugar, fats, or the albuminoids, and the tissues to be fed by those elements starve, and the whole system is thrown into disease.

It matters but little whether it be faulty diastatic action and the starch not perfectly changed into digestive sugar, or whether it be imperfect peptones and the albuminoids not properly digested, or insufficient action of the pancreatic and liver ferments on the fats, the patient suffers all the same from mal-nutrition.

For faulty diastatic action we have no practical remedy. Soda will relieve the acidity of the stomach, and aid in forcing along the remaining starch to be acted upon by the pancreatic juice.

Pepsin and hydrochloric acid will, in some cases, aid slightly the digestion of the albuminoids, but aids for pancreatic insufficiency in the way of artificial pancreatic ferments, every attempt is worse than a failure. All artificial digestive ferments, when absorbed as such, are poisonous.

Sulph. ether is a direct stimulant to the pancreas, and it increases its secretion and assists in the emulsification of the fats of the food, and is invaluable in the treatment of consumptives where both starch and fats are not well digested.

It may be truthfully stated that all chronic wasting disease is the result of indigestion, or attended with it; and that the great result to be accomplished first, and without which all efforts will fail, is to correct this defect.

Nervous debility and neuralgia are often the results of nerve starvation. They are now, more than ever, the dread of every intelligent physician, and the terror of all business men. The weary hours of pain, and the sleepless nights of those suffering from nervous diseases, are but the beseechings of an exhausted nerve for food.

Hungry and starved, they make their wants known by the pain they set up as their only agonizing cry, and no medication will give permanent relief until the hunger is satisfied.

Having these facts before us, in which direction does medical science point us? Surely there is but one rational plan, and that is in the direction of food suited to the digestive condition of the sufferer.

Our research then must be to find a more easily

digested and assimilated food. Observation seems to sanction the fact that vegetable food elements are more readily assimilated by persons of feeble digestion than are the animal food elements, and especially when they have undergone the digestive process in the stomach of an ox or sheep. The blood of these animals, when healthy and fat, must contain all the food elements in a state of solution most perfect and freed from all indigestible portions, and hence in a form more easily assimilated than any other known food.

I have used blood food or raw food extracts for more than four years in a large number of cases, and in no case of mal-nutrition has it failed to give relief.

I have given it to patients continuously for months with singular benefits, especially in complicated cases of dyspepsia attended with epigastric uneasiness arising from innervation, and in cases of nervous debility of long standing.

The sudden and full relief this food affords patients who have a constant faintness at the stomach, even immediately after taking food, shows how readily it is assimilated. The faintness is a form of hunger, and is the cry of the tissues for food, not quantity but quality. A food that the famishing tissues can appropriate and thrive upon. Raw food is equally adapted to lingering acute diseases. I have used it in the troublesome sequelæ of scarlatina, when there was exhaustion from abscesses in the vicinity of the carotid and submaxillary glands, and in protracted convalescence from typhoid fever with marked advantage.

The cases that I especially value it in are laryngeal consumption and nervous exhaustion, in which cases there is always more or less derangement of the digestive tract, such as pain in the stomach, constipation, eructations of gases, distress after taking food, etc.

Raw food should be taken with each meal, the patients taking such other food as they can readily digest, in quantities suited to the individual cases. It adds much to the nutrition of the patient, overcomes the constipation, subdues the nervousness by increasing the strength, and is just the amount added which is required to secure success.

Intelligent prescribing of drugs implies, first, a knowledge of the power of the drug over certain forms of diseased action; second, a clear understanding of the nature of the disease to be treated, then the dose pushed until the work is accomplished. The same is true of nutrition. Nearly enough will not satisfy. The full meal only satiates. Raw food added to the ordinary meal of invalids very often accomplishes the full meal, and is the satisfying portion.

The therapeutic test of any remedy is its clinical results, and not pathological theories, and therefore I will add a few cases in which I have used it successfully.

CASE I. Mrs. A., aged 28 years. This patient had been failing for six months. When I first saw her she had a sore throat, cough, free expectoration of a glairy mucus, pain and tenderness through right lung just below the clavicle, debility, emaciation, fever, and night-sweats; pulse, 100; temperature, 99½; appetite poor and food distressed her; had hæmoptysis twice. An examination of the chest revealed a dullness below the righ clavicle with diminished respiratory murmur, with moist crepitations over top of both lungs.

Treatment.—Hypophosphite of soda and inhalations of oil perii sylvestris for two months, with but little or no improvement.

Raw food was added, and in six weeks she gained twelve pounds, and was able to resume her home duties.

CASE II. Miss B., aged 22 years. First saw her in 1880. Symptoms—a coarse harsh cough; free expectoration of cell mucus; pain in left side through to shoulder; throat dry; loss of appetite; diarrhœa and constipation alternating; fever at night; pulse, 110; temperature, 100; considerable emaciation and great weakness, constantly taking colds and having fresh attacks of pleurisy.

She had been treated by her family physician seven weeks with no improvement.

Blisters to the side and raw food were advised, and in five weeks she was able to resume her work in a shop.

CASE III. Mrs. H., aged 55 years. This patient had nervous exhaustion from over-work and the loss of a daughter. She was very much reduced, not able to walk on the street. Great nervousness, sleepless nights, head confused, and troubled days, often affirming that she should be insane. No appetite, food distressed her, constipated and great mental depression, often wishing to die. The whole list of nerve tonics and sedatives were tried and failed. I put her on raw food, and she at once began to mend and in six months was well.

CASE IV. Miss M., age 22. For the last five years this patient has been a constant sufferer from cancrum oris. For weeks at a time her cheeks and tongue have been one mass of ulcers. Whole days the saliva would flow continuously from her mouth. Appetite very poor, with a burning pain in mouth and stomach after taking food, and an intolerable faintness when the stomach was empty. For four years she had been suffering in this way until not able to wait upon herself. One year ago I advised raw food, and she has continued it until the present time. She now has very little trouble from the canker and is quite well and strong, able to share the care of her household.

CASE V. Mr. F., aged 30 years. Bright's disease of three years' standing. Symptoms: Uræmic vomiting; frequent epistaxis; sallow, milky complexion; great thirst; good appetite, but food often came up as soon as swallowed. I saw him, and advised mineral water and raw food, which he was able to retain, and improved on it for a time, but finally died. This case showing that raw food could be retained on the stomach when other food was rejected.

CASE VI. Mrs. A., aged 30 years. Had been treated in a distant city ten years for dysmenorrhœa with contracted os uteri, attended with hysteritis, but no improvement. Her menses had not returned but three times for the year.

Raw food was prescribed, and in forty days her menses returned and continued regular afterward, and in three months she was able to take a position as bookkeeper in a large establishment, where she still remains.

PALLIATIVE MEASURES IN RUPTURED EXTRA-UTERINE PREGNANCY.

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Read before the Chicago Medical Society, Dec. 1, 1884.

An editorial bearing this title and appearing in the New York *Medical Record*, of Oct. 25, 1884, contains the following statement:

"There is no palliative measure for a ruptured extra-uterine cyst; there is no expectant treatment; and there is no other way known to medicine by which a woman in this condition can be reasonably expected to survive, save by the prompt use of the knife, and there is no reason for thinking that she would die if this be resorted to in time."

The object of this paper is to offer a protest against this *ex cathedrâ* mode of settling a question, in regard to which there is room for considerable latitude of opinion. Dogmatism, offensive and unphilosophical under all circumstances, attains its acme of arrogance when applied to rules of practice in medicine and surgery. Certainly, the use of the universal proposition, in the assertion just quoted, is both in bad taste and positively erroneous. In the ensuing discussion, attention is limited to the consideration of tubal pregnancy, because of its most frequent occurrence, and usually early termination. Furthermore, criticism of the treatment of the case, detailed in the *Record's* editorial, is incidental.

Tubal pregnancies may terminate: (1) in the death of the embryo and gradual resorption of the ovum, before rupture of the sac; (2) the sac may rupture, but the egg may remain within, and act as a tampon; (3) the cyst may rupture into the *ligamentum latum*, with the formation of a hæmatoma; (4) the sac may rupture into the peritoneal cavity, with the formation of a retro-uterine hæmatocele; (5) the sac may rupture into the peritoneal cavity, and the life of the woman may be threatened by free hæmorrhage, or the resulting peritonitis; (6) the ectopic pregnancy may persist until the expiration of the full period of utero-gestation. It is impossible, in the present state of medical knowledge, to make any positive statement as to the relative frequency of these terminations. Until within a comparatively recent period of time, only those cases were designated tubal pregnancies, in which the diagnosis was made by an autopsy. It is highly probable that ectopic gestation is of more frequent occurrence than the older systematic writers would lead one to believe. It is also probable that termination by recovery is not an uncommon event. These assertions receive some support from the experience of Professor Karl Schroeder:[1] "I myself see so frequently cases of tubal pregnancy, in which the diagnosis is positive, pursuing a favorable course, that I consider recovery as the regular termination."

The second, third, fourth and fifth modes of termination are alone pertinent to the present discussion.

(2.) *The sac may rupture, but the egg may remain within, and act as a tampon.* Such cases, with favorable results to the mothers, have been observed by *Wiedersperg*[2] and *Virchow*.

Operative interference in such cases is so obviously contraindicated, that it is unnecessary to enter upon any comment upon that subject.

(3.) *The cyst may rupture into the ligamentum latum, with the formation of a hæmatoma.*

This termination of tubal pregnancy has been observed, up to the present time, with comparative infrequency.[3] There can be no doubt, however, as to its actual occurrence. The sac ruptures into the broad ligament, the embryo escapes, and an extraperitoneal hæmatoma arises. The embryo may go on to full development in this region; usually it dies and undergoes reductive metamorphosis, while hæmorrhage is checked by the pressure of the folds of the broad ligament.

Schuchardt[4] has demonstrated the possibility of this mode of termination by his celebrated case, published in Virchow's Archives. J. Veit[5] has observed the same occurrence.

Primary laparotomy is not indicated by this termination, for the reason that the natural history of the condition shows that hæmorrhage is usually controlled by the relations of the parts, and ultimately complete resorption of coagula and embryo occurs. Exceptional cases, however, may indicate operative procedure for the arrest of hæmorrhage or removal of the embryo.

(4.) *The sac may rupture and the fœtus escape into the peritoneal cavity, with the formation of a retro-uterine hæmatocele.*

Ollivier, Leclerc, Schroeder, Vignès, Gallard, Karl Braun, Veit, Chiari, and others, have observed this mode of termination. There can be no doubt as to its occurrence.

As to the frequency of its occurrence, opinions and statistics widely differ. Gallard[6] makes the statement that hæmatoceles, arising independently of trauma, are almost always due to the rupture of the cyst of extra-uterine pregnancy. Schroeder[7] says: "This etiology of the hæmorrhage (retro-uterine hæmatocele) is decidedly of very frequent occurrence, even if the tubal pregnancy is seldom diagnosticated."

Veit[8] has very recently collected 146 cases of hæmatocele, of which 40, or 28 per cent., are referred to this mode of origin. He is convinced that 28 per cent. is a low estimate of the frequency of occurrence

[1] Karl Schroeder's Lehrbuch d. Geburtshülfe, Bonn, 1884, p. 422.
[2] Otto Spiegelberg's Lehrbuch d. Geburtshülfe, Lahr, 1882, p. 290.
[3] Karl Braun's Lehrbuch der Gesammten Gynækologie, Wien, 1883, p. 634.
[4] Virchow's Arch., Bd. 89, p. 133.
[5] Die Eileiterschwangerschaft—von Dr. J. Veit, Stuttgart, 1884.
[6] Lecons cliniques des maladies des femmes. Paris, 1875. p. 635 ff.
[7] Handbuch der Krankheiten der Weiblichen Geschlechts-Organe, von Dr. Karl Schroeder, Leipzig, 1881, p. 452.
[8] Die Eileiterschwangerschaft von Dr. J. Veit. Stuttgart, 1884, p. 14.

of this etiological factor. It is highly probable, if not positively determined, that the rupture of the cyst of ectopic pregnancy is a more frequent cause of retro-uterine hæmatocele than the standard American and English text-books are disposed to admit.

The course and results of retro-uterine hæmatocele, caused by the rupture of the cyst of extra-uterine pregnancy, have been the subjects of recent study. The extravasated blood is collected in the recto-uterine peritoneal pouch, encysted, and, together with the product of conception, may be resorbed after a very variable interval. Hæmorrhage in these cases is arrested by the diminution in the force and frequency of the heart's action, the process of thrombosis, and the equalization of blood pressure within the arteries and the extravasation. (Schroeder.) Death[1] from anæmia, in the 40 cases collected by Veit, occurred but three times. No one who is at all familiar with the literature of the subject, more particularly with Leopold's experiments upon the lower animals, can entertain any doubt as to the possibility of complete resorption of the embryo. Schroeder has seen, in an autopsy on a woman, dying from a ruptured tubal pregnancy, all the peritoneal lymphatic vessels filled with red blood. Fatal peritonitis, acute or chronic, like fatal hæmorrhage, is a relatively rare termination. Schroeder, Veit and Voisin have expressed themselves very positively in favor of the view that, after rupture of the cyst of tubal pregnancy, with escape of the product of conception and the formation of a retro-uterine hæmatocele, recovery is the rule, and death the exception.

The prognosis is the same as in cases of hæmatocele from other causes. Hæmorrhage is seldom the cause of death. Peritonitis is a prognostic element of more serious import. Of the 40 cases collected by Veit, 11 died of peritonitis, at intervals of from a few days to several months.

Remarkable unanimity of opinion, as regards the treatment of retro-uterine hæmatocele, from whatever cause, exists at the present time. Schroeder, Veit, Karl Braun, Spiegelberg, Barnes, Emmet and Thomas advise the expectant plan of treatment. Absolute rest in bed in the horizontal position, or with the hips elevated, and the thighs slightly flexed upon the abdomen, the local application of cold,—ice-bags to the abdomen, bits of ice in the vagina, cold water rectal irrigation, catheterization of the bladder, in case of retention of urine, the exhibition of opium and chloral hydrate, are points of treatment, to which it is scarcely necessary to call attention in this connection.

Surgical interference, at an early stage, is seldom, if ever, indicated for reasons detailed in the foregoing brief sketch of the natural course and results of the condition.

Surgical interference, at a later stage, is considered justifiable under two indications: (1) persistence of the tumor in its original volume through weeks, without any diminution or alteration, with the occurrence of pains, which confine the patient to her bed for a considerable period of time; (2) the occurrence of suppuration or ichorous ulceration within the tumor. (Bandl, Billroth's Handbook.)

Even under these indications, laparotomy is not regarded as the operation of election. Dr. A. Martin astonished the members of the *Naturforscherversammlung*, in Salzburg, by the communication, that he had performed laparotomy three times, on account of abdominal, blood tumors. The three patients died. Baumgärtner, since the reading of Dr. Martin's paper, has performed laparotomy, on account of a peri-uterine blood tumor, once. The patient made an excellent recovery. With these statistics, laparotomy has roused no degree of enthusiasm. Operators of the present day limit their interference to the various modifications of the methods, originally suggested and practiced by Nélaton, that is, vaginal puncture, or incision.

(5.) *The sac may rupture into the peritoneal cavity, and the life of the woman may be threatened by free hæmorrhage, or the resulting peritonitis.*

Free hæmorrhage into the peritoneal cavity and consecutive peritonitis have been regarded, for so long a period of time, as the exclusive mode of termination of tubal pregnancy, that no evidence is required to establish the fact of occurrence. Again, opinions and statistics differ widely as to the relative frequency of this mode of termination. The tendency of modern investigation is in favor of the view that free hæmorrhage into the peritoneal cavity and resulting peritonitis are unusual occurrences. [1] Fatal hæmorrhage is very seldom observed, according to the observation of J. Veit, when rational expectant treatment has been practiced. Cases terminating by recovery either do not come under observation, or doubt as to the accuracy of the diagnosis is entertained. On the other hand, cases terminating by death from hæmorrhage or peritonitis are almost always subjected to post-mortem examinations. Very naturally, in the course of time, the fallacious induction—that death from hæmorrhage or peritonitis is the rule—has been made.

It is highly probable that many of the cases, recently reported in American and foreign journals, of favorable termination of tubal pregnancy before rupture of the cyst, as the result of the passage of the electric current, have resulted favorably, not from the death and resorption of the embryo within the sac, but from rupture of the cyst, death and escape of the embryo in the modes just indicated. The effect of an electric current upon smooth muscular fibre is to produce a contraction. When the number of séances, the currents employed, and the symptoms following, are taken into consideration, it is difficult to escape the conviction that in some cases, at least, the favorable result ought to be ascribed to rupture of the cyst. The question of treatment, when the patient's life is threatened by free hæmorrhage into the peritoneal cavity, or by peritonitis, is difficult and important.

Wiltshire, Lawson Tait, Knowlsley Thornton, and *our editorial friend* of the New York *Medical Record*,

[1] Die Eileiterschwangerschaft, von Dr. J. Veit, Stuttgart, 1884, p. 15.

[1] Die Eileiterschwangerschaft, von Dr. J. Veit, Stuttgart, 1884, p. 65.

see in this condition an absolute indication for *immediate laparotomy*. There are others—and they may be justly designated "surgical leaders of the day,"—who do not recognize this absolute indication for immediate operative procedure.

The prognosis of laparotomy, after rupture of the cyst, is by no means as favorable as in tubal pregnancy before rupture.

The reasons for gloomy prognosis are evident.

The operation must be performed upon a woman in a condition of more or less profound shock. The state of acute anæmia exercises an unfavorable influence. Ether is dangerous, from the possibility of dislodgment of a thrombus and renewal of hæmorrhage. Chloroform must be used with extreme caution, on account of the enfeebled heart. The blood poured out into the peritoneal cavity is mechanically removed, instead of undergoing resorption. The *technical* difficulties of the operation are great. The anatomical relations of the parts are very different from those in cases of consecutive or secondary hæmorrhage, after extirpation of tumors by abdominal section. It is difficult, even on post-mortem examination, to differentiate between tissues and organs. *In viva*, the complications are still more intricate, as all who have had experience will testify. The choice of time, of place, and of operator, is out of the question. Abdominal section must be made without qualified assistants, and without attention to the principles of antiseptic surgery. If the patient is removed to a hospital, she may die on the way. If she survives transport, the assumption of spontaneous recovery is justifiable.

"Is, therefore," says Veit, "the prognosis of the operative procedure gloomy *per se*, the prognosis of the tubal pregnancy remains the same; indeed, it grows better with every hour the patient lives after rupture, so that of laparotomy and arrest of hæmorrhage there really can be no serious talk." Finally, Veit, after a careful study of the literature of the subject, has been unable to find *one recorded case*, in which the patient's[1] life was saved by the operation.

Under the expectant plan of treatment, is included a variety of expedients. Absolute rest in bed, in the horizontal position, the free exhibition of opium, compression of the abdominal aorta by sand-bags, shot-bags, ice-bags, tourniquet, or the band, rectal irrigation with ice-water, are the more important methods by which hæmorrhage may be controlled and the process of thrombosis favored. It is not necessary to add that all cardiac stimulants and counter-irritants must be proscribed.

If, notwithstanding this therapy, symptoms of internal hæmorrhage persist, abdominal section may be resorted to as the only procedure, that offers hope.

It may not be amiss to note the "surgical leaders of the day," who defend the line of treatment thus briefly sketched:

Karl Braun, Karl Schroeder, J. Veit, August Martin, Sir Spencer Wells, T. Gaillard Thomas, and Thomas Addis Emmet, all advise the expectant plan of treatment, until it has proved futile.

2330 Indiana Avenue, Dec. 1, 1884.

[1] Veit. Die Eileiterschangerschaft, p. 64.

SPECIALTIES, AND THEIR RELATION TO THE MEDICAL PROFESSION.

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Read before the American Academy of Medicine, August, 1884.

The title chosen for this paper is purposely a little ambiguous and possibly a trifle ungrammatical; but it was desired to express by means of the title certain aspects of the subject of specialism in medicine which are worthy of consideration, and which are better indicated by this title than by one worded differently. The topic is not "*specialists* and their relation to the members of the medical profession," but the broader one of specialism, or the concentration of thought and work in one direction, however it is accomplished. Nor is the topic "specialties and their relation to the *science of medicine*," but is broader even than this, and looks toward the relations which those who are practicing and advancing medicine should bear toward the development of its science and art, by developing the separate or special portions of that science and art.

The thoughts to be presented in regard to specialties in medicine may be grouped under several quite distinct heads:

1. Specialties—what they are.
2. Why they exist.
3. The relations they bear to the progress of medicine.
4. The relations they bear to general medical practice.
5. Specialists, or those limiting their practice to a single branch of medicine, or class of diseases.
6. The education necessary for the proper practice of a specialty.
7. The future of medical specialism.

First, as to what medical specialties really are. A specialty is defined by Webster to be "that which is the special or particular mark of any person or business: that for which a person is distinguished, or which he makes an object of special attention." A specialty in medicine is some particular branch of the science or art, or even some individual disease, to which especial attention has been given, or with which, from any circumstance, a medical man is exceptionally well acquainted. In the broadest sense, every one practicing medicine is more or less of a specialist, for it is impossible to have knowledge and experience so evenly acquired that they should not be relatively greater in one or more directions. This is certainly so in every other branch of science. Now, the step from having special knowledge and experience in any one direction to making advances in this line, is not, or should not be, very great, and with this increased interest in and study of a branch, the further step into concentrating more and more of energy and thought upon the special subject which has become of interest, is most natural and fitting. Thus it is that specialties have grown in medicine in

earlier times; thus it is that out of the general mass of those engaged in the study and practice of medicine, one and another has in times past emphasized and developed one portion and another of the vast field in which all have labored. Thus, from the conglomerate mass of diseases, individual ones have been carefully differentiated, groups and classes have been established, and the field of general medicine and surgery has been greatly cleared, and much light has shone through what was almost impenetrable darkness two hundred years ago.

This development of the science and art of medicine gives in part the answer to our second question:

2. Why do medical specialties exist? The answer to this is comparatively simple: First, It is because the entire field of medical knowledge has become so vast, and the advances in it so great, that it is an absolute impossibility for any one mind to perfectly grasp the former, or to follow and comprehend the latter; and unconsciously the choice is made by every one, whereby certain things are specially considered and certain others are slighted. It is with difficulty now that even a specialist can keep thoroughly posted in all that is accomplished in his own line of practice, and it is utterly out of the question, even if it were desirable, for him to read all that is written in his branch alone. Second, Medical specialties but follow the lead of other branches of science, which are all divided and subdivided so that no scientist pretends to grasp the whole perfectly. In the other professions the same has taken place; in the law the lines of knowledge and practice are distinct between civil and criminal law, real estate, patent-office, international, and other departments of the legal profession; in mechanics, naval, mining, mechanical, and civil engineering are all quite separate departments of work; and so on of many other professions and occupations. Third, Medical specialties exist because there is a public demand for them, and the supply follows accordingly. The public wish, and are willing to pay for, the highest attainable knowledge and skill in regard to each and everything relating to the practice of medicine, and successful dealing with diseases which have previously proved obstinate or distressing under treatment, will inevitably lead to increased confidence in the individual who gives relief, and invariably tend to enlarged opportunities in the same direction. Thus, were the entire profession at any one time to be placed on a perfect equality of knowledge in a community, a greater or less degree of special practice would unconsciously develop, and certain members would, before long, stand more prominent than others in particular lines of work.

This leads us naturally to the consideration of our third topic:

3. The relation which medical specialties bear to the progress of medicine. As we have seen, specialties are the natural and necessary outgrowth from the progress of medicine. They have not arisen from any premeditation or desire to split up the subject of medicine into many disjointed parts, but they are only the long, far-reaching roots which the parent tree of medicine has sent out to draw sustenance from the deep and hidden springs of wisdom and knowledge, in order to minister to the growth and development of the trunk and branches, which in turn bear the leaves and fruit of healing. To oppose specialties is to sap the life of the entire science and art of medicine. Who can deny the gain which has resulted from the first great specialty, namely, surgery, or who can compute the lives and suffering which have been saved by those who have devoted special attention to this branch, even to the exclusion of ordinary medical practice? Subdividing this branch again, who can estimate the value of the lives which have been spared through the exertions of those who have given great attention to a single operation, ovariotomy? Who can be blind to the progress in the science and art of medicine made through the labors of those who have confined their energies to gynæcology, ophthalmology, laryngology, dermatology, neurology, and other special lines of work, and who can claim that the same advances could have been made by those whose thought and practice extended over the entire, rapidly enlarging circle of medical knowledge?

It is undoubtedly true that many valuable additions to special lines of practice have been made by those engaged in general medicine, of which ovariotomy, perhaps, is the most striking example; but, on the other hand, the mass of knowledge in general regarding particular diseases has been contributed mainly by those whose opportunities gave unusual acquaintance with them.

It must never be forgotten that the existence of specialties renders it possible to give to the medical profession a large amount of enlightenment and experience in particular directions which could not otherwise be obtained. Thus, the gathering together of patients afflicted with diseases of a particular class, and the experience gained therefrom, enables the teacher to tell in a moment that which another might take a lifetime to acquire, and by the exhibition of cases, to demonstrate features of disease and methods and procedures of practice which another could learn only with the greatest difficulty, if at all, from personal experience.

We come now to consider our fourth topic:

4. The relations which medical specialties bear to general medical practice. From what has preceded it is evident that as specialism is the outgrowth of general medicine, the connection between the two is very intimate; they can no more live apart than can the tree and its root live and thrive when torn asunder; the life of the one is the life of the other.

It was remarked that every practitioner of medicine was, to a greater or less extent, a specialist, and the converse is still more certainly true, namely, that every really good specialist must be acquainted with general medicine and be able to practice the same with success; he cannot rationally and properly treat any special disease without understanding and appreciating the relations which that disease may bear to the system at large. Other things being equal, the best specialist is undoubtedly he who has the best knowledge of and experience in general medicine, and who applies the same in connection with the line of practice in which he is specially engaged.

The greatest errors and harm can come from the too exclusive concentration of thought upon a single branch of medicine without a proper appreciation of the relations which may and generally do exist between the organ of disease under treatment and other organs of the body, or the general system.

This leads us again, very naturally, to the consideration of our next subject:

5. Specialists, or those limiting their practice to a single branch of medicine or class of diseases. A specialist is defined by Ogilvie to be "a person who devotes himself to a particular branch of a profession, art, or science; a person who has studied and acquired a special knowledge of some particular subject." If the foregoing argument and reasoning are correct, a true specialist in medicine may be defined to be a "physician or surgeon who is thoroughly acquainted with general medicine, theoretically and practically, but who has devoted particular attention to, and acquired peculiar knowledge and skill in some special branch or department of medicine, or class of diseases." The proverb *poeta nascitur, non fit*—the poet is born, not made, applies equally to the specialist as to the poet: he should be born out of the womb of mother medicine, should feed on the rich milk which nourishes all her children, and should grow out of the necessities of the case, being nursed in the lap of experience, and in full process of time may develop into something useful; but to jump into the practice of a specialty, like Minerva from the head of Jupiter. fully armored and ready for the fight, can seldom be accomplished with the highest success. And yet many attempt this yearly; the idea seems very prevalent that a young man has but to secure a diploma, spend a little time in the study of one special subject in one of the larger cities here or abroad, announce himself as a specialist, write an article or two, and, *presto*, change, he is a veritable specialist, only waiting for patients.

This tendency to hasty and imperfect preparation in the matter of general medical study and general clinical experience has resulted in much harm to specialism, and much injury to the science and art of medicine, as well as to its reputation before the world. Want of proper knowledge and training leads to imperfect medical observation, undue or insufficient appreciation of concomitant or allied symptoms or features of disease, and too often to unsuccessful treatment, from a failure to judge wisely in many matters relating to the individual under treatment. While accurate diagnosis and correct pathology are most essential and vital elements in medical practice, the broad knowledge and experience belonging to the general practice of medicine best fits one to understand and treat individual cases of disease, and the specialist will have but little relative success who ignores systemic influences, and pays exclusive attention to local phenomena and local measures.

The practice of a specialty is, therefore, beset with no little difficulty, for the tendency is very strong to concentrate thought and attention too exclusively on one idea, and to see and think of only one organ of the body or class of diseases, and thus to lapse into what Lord Lytton calls "the wretched narrow-mindedness of every one who cultivates his specialty alone." Let no one, therefore, envy the specialist, for in addition to the immense drudgery and monotony of seeing and dealing with the same diseases over and over again, and the untold labor of treating the thousands of free patients in public institutions, which give him his knowledge and skill, he has a constant struggle, if he be a true specialist, to rise above his speciality, and to maintain his proper relations to the science of medicine. Few but those who have undergone it can appreciate the labor involved in connection with these matters, to say nothing of literary work and teaching; so that no one should seriously contemplate special practice who is unprepared for long and arduous toil. It is, I think, a fact, that the health of specialists breaks down more commonly than that of those engaged in the round of general practice; certain it is that the daily weariness and exhaustion of one who has spent a day in varied occupation, out in the world, from place to place, with changing scenes every moment, cannot excel that of the busy specialist who, going round and round the treadmill, day by day, over the same ground again and again, never seems to advance much beyond the point at which he started.

It is useless for our subject to enter this matter more fully, but many specialists will be willing to agree that in many things they envy the general practitioners—in the largeness and variety presented by their field of operation, in the many warm and true friendships formed, and in their varied and healthful occupation, which a possible larger pecuniary success in a few instances in a specialty by no means counterbalances.

We come now to consider:

6. The education necessary for the proper practice of a specialty. As may be judged from what has preceded, a specialist's education should be most thorough and complete. In the first place, the academic and collegiate education is most necessary, both for the training of the mind to close study and observation, and for the knowledge of the languages, ancient and modern, which are continually required in the study and prosecution of any special branch.

In beginning the study of medicine proper, the idea of a specialty should be kept entirely out of mind, and the most thorough course of general medical study possible should be followed, with especial attention to chemistry, histology and pathology. The practical portions of study should also be closely followed, and later in the course as much as possible should be learned from clinics. If the medical man is subsequently to give his attention to one branch more exclusively, it is all the more reason that he should have the foundation and groundwork thoroughly and perfectly learned, for it is a constant lament of specialists that there is so much outside of their specialty which they would like to know, but which their subsequent press of work prevents their acquiring. It may be stated most positively that no portion of a thorough medical education is wasted in preparing one for the practice of a special branch, not even obstetrics for a laryngologist, or ophthalmology for a gynæcologist; sooner or later every particle

of medical knowledge which can be acquired will be brought into requisition. Three years is all too short for laying a groundwork which may be called upon for use many years later, to solve some doubtful question in pathology or therapeutics.

On graduation, it is exceedingly important to have a period of service in some general hospital as interne, for two years if possible; this is preferably to be in a medical service, rather than in a surgical. If one is to deal with only one class of diseases in his future practice, it is all the more necessary that he should have practical and personal acquaintance with general diseases beforehand, and this hospital service, if well employed in note-taking, will be to him afterward a mine of wealth of experience from which he may draw with the greatest comfort and benefit. All who have served as internes in a hospital will appreciate this, and will recall how little they found that they knew practically on leaving the medical college and entering the hospital. It makes one shudder to think of those who have plunged into a specialty without having thus had their studies crystallize into practical shape under the fostering care of the experience acquired in hospital life. This service in a general hospital is of far more value, practically, than a residence in a special hospital devoted to the branch which is to be followed.

On leaving the general hospital a service in a special hospital is most desirable, and forms the best basis for acquiring the specialty. It is painful to an educated man visiting the centres of medical education abroad, to see how little the younger students there from other countries know of what is well known at home, and much reproach is thereby brought on our own land and institutions.

The student of a specialty should learn all that is possible here before going abroad; otherwise his judgment is warped, and correct impressions and clear knowledge cannot be obtained. Many who have been special teachers here will verify the statement that those who return from studies abroad continually express surprise, on their return, that so much is known here, and the remark is often made that if they had appreciated the fact they would not have gone abroad for study. If two or three years are to be taken for the study of a specialty, a certain, if not considerable, portion of it can be far better spent here first, and then one is able to determine the true value of what may be seen and learned abroad. Space forbids entering further on this topic, on which much might be said, as it is a most important matter, bearing strongly on our subject.

When the future specialist has completed this portion of his preparation, what course should he pursue in regard to active practice? For many reasons it is important that he should attend first to general medical practice. This should be the backbone of his life, both for the purpose of remuneration until he can secure adequate special practice, and more especially in order to accustom himself to meet and treat patients, recognizing readily their various complaints and adapting himself to their different constitutions. He will soon enough get narrowed down to the little rut or track around which he must travel day after day, and this early experience in general practice will be looked back upon with pleasure and profit as he plods in his beaten circle in after years.

For some reasons it is desirable for a young specialist to secure a class of patients in a dispensary other than those presenting the complaints he is to treat. Indeed, the best is a general class of digestive disorders, including rheumatism and the various unclassified diseases which are often grouped together. This will enable him to get a wider and a firmer grasp on general medicine. Also, if it were possible, later, to secure an appointment as attending physician to a hospital, it is wise and beneficial to take one devoted to general diseases, and it would be well if all specialists could have such appointments in general hospitals, as they would best serve them in keeping up their practical acquaintance with general medicine.

In regard to the matter of a specialist practicing general medicine later, in connection with his specialty, or confining his practice to the latter exclusively, a few words may be said. Although theoretically, as has been shown, this is highly advantageous and proper, there are certain practical objections to it which render the latter course, now generally pursued, necessary if not desirable. First, in the large cities there is quite sufficient work for a specialist to do without going outside of his special line. Those who really get into a good practice have often all that they can do, and many are quite exhausted with this work alone. Second, the hours which the consultant is required to be in his office are such that he cannot well attend to outside parties, however much he may desire. In the cities it is necessary to have early hours for the business gentlemen, and morning and noon hours for ladies, so that with critical cases it would not be right or proper to delay the visit until after office hours, which are often prolonged, say even until two o'clock or later. Third, there is always the danger of a specialist, by his success in a single disease, making such an impression that the patient wishes his care on all occasions, and thus he may readily alienate from their regular attendants individuals who have perhaps, been referred to him in his special branch. This is an experience which every specialist has had more than once, and one is urged continually to do this by enthusiastic patients. The only safe way, so as never to give offense to physicians or patients, is to avoid the acceptance of such patients for other diseases on any account whatever, and this is made the easier if, after one has become established in special practice, he abandons all but such cases as legitimately come within his special province.

Thus, we see, the specialist should properly grow out of the general practitioner, either following throughout some previously determined course, or shaping his practice as circumstances and experience seem to direct.

We come now to our final topic, namely:

7. The future of medical specialism. Many medical men view the comparatively recent growth of specialties with more or less alarm, and fear lest, with specialists for every organ of the body and class of disease, there will soon be nothing for the

general practitioner to do, and on this ground some have opposed specialists and have failed to seek their aid, even in proper cases. This fear is quite natural, for, verily, if every case should be turned over to the various "ologists" who might possibly claim it, the family physician would indeed become but a distributer of patients without aiding his own pocket or reputation.

But, like every other principle in political economy, this one will solve itself on the basis of supply and demand. If the public want better treatment in difficult cases than they have had, and if they are willing to pay for it, it will surely be forthcoming somewhere or in some way—so that the tendency to specialism in medicine cannot be arrested, even if it were so desired. In the law the patent office lawyer gets the difficult and doubtful cases, and the celebrated criminal lawyer is retained where his services are most needed.

But there is a solution of the difficulty which is rapidly working itself out, and which daily becomes more and more apparent. By the multiplication of colleges, post-graduate courses and clinics, and by the great increase of periodical literature and of books, these very specialists are doing all in their power to enlighten the medical profession, present and future, not only as to what has been already learned, but what they are daily learning from their extended experience. They are daily, at great pains, giving to the medical profession the most careful and particular instruction, not only as to the grosser matters in their several branches, but also the more minute and special points in diagnosis and practice; they are, in fact, giving away their most precious truths, points of practice, secrets even, they are publishing widecast all that they use in their successful practice. An outsider would exclaim, that seems incredible, and yet it is a fact, and who can deny it?

Now, what is the solution of the question? Simply this, the coming medical man will be educated not only in all that his predecessors knew, but he will acquire such an additional knowledge of the various special diseases to which the body is subject, that he will be able to treat successfully a large share of the ordinary cases. No specialist now claims that all cases coming under his branch should come to him, but he seeks continually to enlighten others so that they can manage them, and he rather delights in the more difficult and obscure cases. And such must always exist, and the student of the special branch will come in to aid where the skill of the general practitioner naturally fails.

Who then is to blame at the present time if the specialist succeeds in curing cases where others have failed to give relief? Who is to blame if other similar cases come to him on the recommendation of those who are cured? Shall he refuse to give relief when asked?

The thoroughly educated and properly qualified specialist, then, has and will ever have his functions to perform in the great field of the science and practice of medicine, and his powers for good will increase, and his field of usefulness enlarge, with the advancing world of science, and the broadening and deepening of the stream of knowledge. What a necessity, therefore, that the formation of this class of practitioners should be most zealously guarded in the future; what need is there that their general education by collegiate instruction should be strongly and well accomplished, and that their general medical education and practical knowledge of the entire science and art of medicine should be most completely and carefully planned and carried out to the letter.

It is recognized and acknowledged with regret that there are those who have entered special practice without the full and proper training here described, and that the tendency of imperfect specialism is to narrowness of mind and even to charlatanry. But is the evil much greater here than that which yearly takes place in the indecent thrusting forth by the many medical colleges of the hosts of imperfectly prepared doctors of all sorts upon the community? Surely the American Academy of Medicine has a great and noble work to do in boldly attempting to stem this tide of evil.

There are certain questions of etiquette in connection with the matter of the relations of specialties to the medical profession which it might be well to consider, did time permit; but this paper has already exceeded the limits intended, and their consideration must be deferred.

In conclusion, the matters here presented may be briefly summed up as follows:

1. The science and practice of medicine has, in company with other sciences, become so vast that no one mind is capable of fully grasping every portion of it.

2. Unconsciously its various departments have become divided up, and from natural causes certain men have become prominent in various departments.

3. These so-called specialties in medicine are so great and extensive each, that particular or exclusive attention is now devoted to them, the study and practice in each branch being sufficient to fully occupy one's time.

4. The development of these branches has greatly increased the scope and extent of medical knowledge.

5. Every medical practitioner should be more or less of a specialist, excelling in some particular direction.

6. To properly follow and develop one of these specialties, the medical man should be particularly well educated, theoretically and practically, in general medicine as well as in his special branch.

7. This tendency to specialism in medicine cannot be arrested; but the difficulty tends to solve itself, by the education of practitioners and students in these specialties, so that the majority of simpler cases shall be treated by them, while the more difficult and obscure cases will naturally fall to the specialist who refuses to treat other diseases and confines himself to the practice of a single branch.

ADDITIONAL POINTS IN THE USE OF COCAINE MURIATE.

BY W. W. SEELY, M.D., CINCINNATI, O.

The extreme scarcity of the new anæsthetic, *cocaine muriate*, has rendered it clinically impossible for any of our observers to test its advantages and disadvantages in all directions, and hence contributions from different sources are needed to complete its history.

I have had a supply from three different sources—Foucar, of New York; Parke, Davis & Co., and Wilfert, of Cincinnati.

That the drug thoroughly and completely anæsthetizes the conjunctiva and cornea, needs no further mention. In fact, I think it might be affirmed that it will anæsthetize any part it comes in contact with that will rapidly absorb it—a mucous membrane in any locality, and the broken skin, and such parts as it can be brought into contact with by the hypodermic needle, as witness the case reported by Carmalt, of New Haven, in the last number of the JOURNAL.

The smarting and burning of small abrasions and cuts are set aside by the cocaine in about a minute, as I have had occasion to both witness and experience. In regard to the new points I have to offer, I will state:

1st. That the effects of the drug seem to be more rapid and persistent, and are produced by a smaller amount, in the normal state of the parts than in the morbid.

This point I deduce from some cases of corneal and conjunctival inflammation experimented upon, and in a specially carefully tested case of bad superficial excoriation of the cornea as result of a burn, and in which lead wash had been used by some one. It was almost impossible to more than render pricking of the cornea tolerable, while in three other cases of my own and one by Dr. Tangemann, my assistant, the corneal opacities could be tattooed with almost no pain, if the remedy was put in every few moments.

2d. The necessity of using the drug during the operation, as its effects seem to be neutralized by the manipulations.

This would seem to have been demonstrated by the tattooing cases.

3d. As fresh surfaces are exposed, more of the drug must be used, and a few minutes must be given for its absorption, as for example in the operation for strabismus. If care is taken to instil the solution into the wound repeatedly, the operation can be robbed of about all its pain, as I have demonstrated in two cases.

It would be fair to conclude from the above that enucleation might be done with very little pain, if sufficient time is taken for the medicine to act, constantly instilling it into the wound.

4th. That the sensibility of the iris can be, to some degree at least, diminished.

From my personal experience in three iridectomies, two being made as part of the Graefe cataract operation, the other for artificial pupil, I could not say that all sensibility of the iris can be set aside. It must be borne in mind that a large portion of old persons will not complain at all of any of the steps of a cataract operation, hence it will require a large number of observations to settle this point.

In my iridectomy case, after the corneal incision, I repeatedly allowed not only a two but a four per cent. solution to enter the eye by making the wound gape and waiting ten to twelve minutes, even though the conjunctival and corneal sensibility had been gone for ten minutes before instilling into the wound, and yet the patient complained that pulling the iris gave pain. In the four cataract cases I have used it in, two were iridectomised and two not, and the operations were all absolutely painless. (I refer the reader to the statement made above in regard to extractions in old people.)

There seems to be no doubt about the drug acting as a contractor of blood-vessels. It is also feebly mydriatic in its action—the mydriasis in extreme cases lasting thirty hours. So far I have failed to find any case in which its near point was influenced, showing a paresing effect on the ciliary muscle, though, since we can scarcely have mydriasis without some paresis of accommodation, further investigations will probably show that the drug extends its influence to this muscle. The practical point in this connection is that neither the mydriasis nor paresis of accommodation are sufficient to incommode the patient. Temporarily at least the new anæsthetic has a controlling influence over pain in the eye, arising through various morbid conditions, but in how far it may be applicable in the various painful inflammations cannot be determined till it is produced in greater quantities and the price so reduced as not to render it prohibitive. Certainly if it will pass through to the iris at all—and its mydriatic effects show that it does to some degree—it should be of service in iritis. Its various properties, acting as it does as a contractor of blood-vessels, as dilator of the pupil, and as a reliever of pain, represent our ideas of a typical mydriatic, but unfortunately the fundamental property of a typical mydriatic is lacking in it, viz.: power and persistency. I have found in two or three well-marked instances that if used after the full effects of eserine have set in, it quite sets aside the pain.

In aural practice it serves a valuable purpose in passing the catheter through such nostrils as are extremely sensitive, and for reducing the sensibility of the membrani tympani and mucous membrane where perforation exists and fungous growths are to be removed or treated.

Even though the enthusiasm excited by the drug should have led us to see results not borne out by extensive use of it, and have excited expectations not to be realized, still, to be able to render painless the painful operations on the conjunctiva and cornea, to rob the various steps of lachrymal operations of a large part of their pain, to render strabismus operations bearable, must be recognized as the great ophthalmic advance of recent years.

S. E. Cor. 4th and Broadway, Cin., O., Dec. 1.

MEDICAL PROGRESS.

MATERIA MEDICA AND THERAPEUTICS.

SUNSTROKE TREATED BY RECTAL INJECTION OF IPECACUANHA.—Dr. Jos. Bancroft (*Australian Medical Gazette*), finding it difficult to administer medicines by the mouth in cases of sunstroke, as they may be drawn into the wind-pipe, and observing that cases which vomited made better recoveries than others, tried emetics, and found it easy to bring about vomiting by injecting ipecacuanha into the rectum. This he does by as soon as possible injecting into the bowels a drachm of ipecacuanha rubbed up in two ounces of water. After the injection he removes the whole of the dress from the chest and abdomen and irrigates the surface with iced water in a watering-can so long as the temperature seems to require it; but, though the skin may be cooled, the thermometer will frequently indicate a body-heat of from 105° to 108°. Vomiting generally takes place within half an hour, and it is astonishing what a quantity of fluid is at times rejected.

MALT EXTRACTS AS FOOD.—Dr. J. Milner Fothergill (*Practitioner*) writes very encouragingly of the influence of malt extracts as food. Their use is the direct outcome of the practical aspect of chemical knowledge in its bearing upon clinical medicine. The chemist observed that in the process of malting the starch of the barley underwent precisely the same change as does starch in the human mouth, viz.: a conversion of the starch into a grape-sugar under the action of a ferment (diastase). The identity of the change led to the utilization of the diastase of cereals for the needs of human infants where the digestion of starch is defective. Hence the numerous malt extracts now on the market.

By admixture with farinaceous food before being eaten, or by being taken practically simultaneously with such food, or before the stomach has become distinctly acid in the digestive act, malt extracts have been found highly useful in the conversion of the starch into grape-sugar.

In the malting process the starch of the grain is more or less converted into grape-sugar; probably some is converted into maltose, while some is less completely acted upon, but is put forward some way toward grape-sugar. In addition, however, to this amyloid metamorphosis, the albuminoids of the grain, and the mineral salts thereof, are retained in a soluble and highly digestible form in malt extracts. As a consequence, malt extracts form a most useful food where the digestion is gravely impaired, whether in infants or in adults. They constitute, indeed, a food of a highly nutritious character in small bulk, and therefore available when the stomach resents the presence of any bulk of food. He cites two cases to illustrate this, one of a middle-aged woman who was "wearing out by starvation," and had tried everything except malt extracts. She was ordered a teaspoonful of malt extract every hour, and lived *entirely* upon this for about two weeks, and then she was able to take other food in small quantity, and continued the malt extract, feeling well satisfied with it at the end of six months of the treatment. In another case, one of cancer of the stomach, with contraction of that viscus to the size of a cricket ball apparently, and where all food was rejected more or less completely, the Cremor Hordeatus Soefflundi (cream deprived of much of its water and preserved by malt extract) was given in a small quantity, about the size of a filbert, every hour; the patient rallied, was much better, and three months later was still holding her own. Comparatively few stomachs rebel against its use.

In many cases where the digestive powers are very feeble, malt extract as a food requiring a minimum of the digestive act is very useful. It can either be taken alone or added to some warm milk. In such form it can be taken an hour, or an hour and a half, after a meal, in many cases with advantage. Especially when some food is required in the course of the night, this admixture of milk and malt extract is of service. It can be prepared at bedtime and kept near the bed in a hot water jug—the lid preventing any taint of the room—and be kept warm under a cover.

The many prepared foods for infants now sold are equally good for dyspeptics. They consist of flour which has been subjected to a high temperature. That is the main fact to remember. In its solubility in the digestive act there is all the world of difference betwixt raw uncooked flour, and flour which has been previously cooked, as prepared food, or baked flour. Such cereal matter can be added to milk, to beef tea, or made into puddings, with the greatest advantage. Farinaceous matters of this "baked" flour order are especially indicated where the digestion of starch is feeble, whether malt extracts be used therewith or not. By the combination of the two excellent results can be attained in cases of grave indigestion. Dr. Fothergill gives three illustrations in cases to support his views.

Mellins's food he looks upon as a most palatable preparation. Liebig's malted food extract is not nearly so toothsome. Malted foods differ from malt extracts in that the diastase is killed by the heat employed. As food they are about as good as malt extract; but they possess no diastasic power. Further, in cases where ordinary sugar undergoes acetous fermentation in the stomach, malt preparations are indicated; he quotes from Dr. Mitchell Bruce as saying, "Maltose is a form of sugar which does not ferment, and will not give rise to acidity and dyspepsia." Sugar, as a main source of fat, is indicated in all cases of emaciation, and in the sadly numerous cases where acidity is caused by ordinary sugar, in malt extract and malted preparations, we find a sugar of the highest utility in practice as not liable to acetous fermentation.

MEDICINE.

RENAL COMA.—Dr. Robert Laundly reports to the *Medical Times* an interesting and instructive case in which he calls particular attention to the subject of renal coma. The patient was a woman 20 years of age, anæmic, lancinating pains in the region of the spleen, bowels loose, three motions a day, vomiting;

twenty ounces of urine daily, which was highly albuminous, pus, no sugar. Was taken with a convulsion, lasting about five minutes, fourteen hours before death. This was followed by a semi-comatose state with the pulse 120 and respirations 24, deep and sighing. On auscultation the air could be heard entering freely into the thorax. She rallied somewhat after an injection into the veins of a solution of sulphate of soda, becoming conscious, but soon sank. At one time the respiration became noisy and she was slightly delirious. The urine, drawn on the day of her death, was reddish-brown in color, putrid, alkaline, ⅓ column of pus, sp. gr. 1,011, *gave a deep brown color with ferric chloride* not diminished by heating. Albumen about ⅓ column, no sugar. Microscopically there were present granular cells, squamous and pyriform epithelium, bacteria and blood corpuscles. In the post-mortem evidences the kidneys were the seat of the most pathological interest, the right kidney weighed only 1¼ ozs., pelvis dilated, medullary and cortical substances indistinguishable, measuring together only a quarter of an inch in breadth. In the left hypochondrium was a mass weighing 38 ounces of adhering duodenum, pancreas and descending colon—in which mass was a cavity the size of an orange, containing purulent fluid—inside this cyst wall was the left kidney, in a condition of sacculated dilatation. All normal kidney structure was absent. There were calculi in both kidneys, but both ureters were patent.

The peculiar interest which attaches to this case is that it presented striking analogies to that form of coma which Kussmaul described as occurring in diabetes, and which goes by his name. The characteristic symptoms of Kussmaul's coma is dyspnœa with free respiratory movements and unobstructed air passages. This has been accepted by Senator as a typical symptom. The other symptoms are rapid feeble pulse, epigastric pain; in this case the nurse said that just before the convulsions the patient complained of *pain in the stomach*, excitement, followed by coma. And lastly, a symptom to which much attention was at one time paid—the peculiar reddish-brown or Burgundy red reaction of the urine with the perchloride of iron. Kussmaul attributed these phenomena to intoxication by acetone, the urine reaction being held to indicate its presence. In a large number of experiments on animals and men, including persons suffering from diabetes, large doses of acetone and aceto-acetic acid have failed to produce any of the characteristic phenomena of this form of coma, although Penzoldt found that by retarding excretion through the lungs, intoxication, hebetude, and coma followed the introduction of large quantities of acetone into the circulation of rabbits, and he contends that when the lungs are disabled by any cause these results will follow. As regards this, Dr. S. Mackenzie found that pulmonary disease was absent, or only recent and slight, in fourteen out of nineteen cases of diabetic coma, while at Gray's Hospital, fourteen out of twenty-six cases of coma presented no visceral lesions whatever, and several cases dying with phthisis or pneumonia presented no coma.

The case related differs essentially from the classical type of uræmic coma in important details. Were there any features by which it might be distinguished from Kussmaul's coma? In the latter condition, convulsions are rare, but yet they do occur; the temperature is normal or subnormal, but so it is in uræmia, except after a convulsive attack. Lastly, the red coloration with ferric chloride did not disappear or diminish on heating. This is held to distinguish the reaction from that produced by salicylic or carbolic acid in the urine, but neither of these drugs were being used in any way about the patient. (Here, however, as a note indicates, any of the acetic, formic and sulpho-cyanogin compounds, which may occur in the urine, give this reaction).

We must, therefore, no longer regard this type of breathing as peculiar to the coma of diabetes, but as a phenomenon which may occur in connection with the terminal coma of a variety of conditions, of which the only connecting link is that there is profound disturbance of the nutrition of the tissues.

ALCOHOLIC PARALYSIS.—Prof. Charcot recently delivered a lecture on this subject at the Salpetrière (*Gazette des Hôpitaux; Med. Times*). He gave to Magnus Huss the honor of having been the first to mention the existence of paralysis in chronic alcoholism. Lancereaux, in 1864, first described its form as resembling saturnine paralysis in the fact that the extensor muscles of the limbs were affected by preference; Leudet added to this that the paralysis was painful—affected the lower limbs, and most especially at night, with integrity of the spinal cord, and lesions of the peripheral nerves and of the muscles to which their diseased branches were distributed. Wilks and Lockhart Clarke, in 1872, noted a disease which they designated as alcoholic paraplegia, which was preceded by motor disturbances, and pains recurring in paroxysms, which the patient compared to electric shocks.

In regard to the etiology, the prior history must be sought for, as in the early periods it is very difficult to obtain an avowal, while, when the affection is constituted, it becomes associated with a certain mental condition. It is very improbable that one form of alcoholic drink rather than another will produce this effect. With that symptom of intoxication, the *nocturnal dreams*, with their nightmares and frightful visions, one of the first indications of this form of paralysis seems to consist in the appearance of *vivid pains*, which are especially felt in the lower extremities. These pains sometimes nearly resemble those which are met with in the first stage of locomotor ataxy, consisting in prickling formications, lancinating and true fulgurant pains which traverse the limbs. They soon become generalized, occupying *symmetrically* the two lower limbs by preference, and accompanied by cutaneous anæsthesia, they invade the upper extremities, and after a certain time, give place to analgesia. The sensation of cold, of heat, or of puncture is no longer felt in the limbs attacked, and contact with the ground is not perceived. It is then that motor paralysis supervenes, which is also symmetrical and affects the upper and lower extremi-

ties, especially the latter, influencing by preference certain groups of muscles, namely, the extensors. The patella-reflex is abolished. Alcohol always seems to respect the muscles of the face. There are marked vaso-motor phenomena in the diffused red or sometimes violaceous color, and the peri-malleolar doughiness which almost constantly exists, without the urine furnishing any satisfactory explanation. At other times there are local sweatings of the hands or feet which appear suddenly, and cease in the same manner, or there are alternating paleness and redness. Finally, at the end of a certain time, there are formed amidst these equine-shaped feet fibrous adhesions of the tendons and thickening of the connective tissue which surrounds the tibio-tarsal articulation, adhesions which render the restoration of the normal movements of the feet impossible. If these patients recover, a surgical operation will be necessary. The paralyzed muscles are softened and their electric excitability is notably diminished.

In regard to the mental state of these patients, it is the same with them as with the subjects of morphinism, they always, when in the early stages of their malady, still retain all their lucidity, and stoutly deny its etiology, while, when the paralysis is confirmed the memory is also lost. The progress of the paralysis is essentially chronic, the acute form being very rarely met with. Its course is progressive, and fatal if the drinking habits are not abandoned, or if the intoxication is already of too long a date. In a young man a paralysis of three months' duration disappeared under the influence of treatment by isolation, the suppression of alcohol, and hydro-therapeutics; but as he yielded to habits of drinking a relapse ensued. The diagnosis differentially in the early period from commencing locomotor ataxy is not easy. The subjects of diabetes and saturnism may also be the victims of alcoholism.

Anæsthesia of the Optic Nerve.—M. Dianoux (*Bulletin de la Société Francaise d' Ophtalmologie; Med. Times*), finds this affection as occurring only in women, or in men who are, so far as their nervous system is concerned, women by nature. The onset is sudden, often during sleep, there are no premonitory symptoms, and there is no pain, though there is often a sense of a dull weight in the head. From the first the blindness is usually absolute, and may last an indefinite time; it rarely affects both eyes, the eyes are equally liable to be attacked. Examination of the eye yields absolutely negative results. It may undergo spontaneous cure, or it may persist for an indefinite time unmodified, or it may gradually pass into atrophy. The diagnosis is easy, the only difficulty which could arise is the weakened form of neuritis which betrays itself by a persistent discoloration of the disc. The prognosis is favorable, the cases that are most favorable are those of the longest standing where the blindness is absolute; if atrophy comes on, or if the onset is gradual, the outlook is not so good. Youth, a delicate constitution, a lymphatic temperament, uterine diseases, and hysteria constitute the best known predisposing causes. M. Dianoux regards anæsthesia of the optic nerve as only a very slight form of the morbid process which leads to neuritis and atrophy of the disc after ischæmia. There is some circulatory disturbance followed by plastic exudation within the sheaths of the nerve, leading to a modification of the myelin which renders it a bad conductor. This exudation may be absorbed without any traces being left behind, or it may organize and compress the capillaries, leading to permanent discoloration of the disc; or if the exudation is more abundant, it may lead to œdema of the disc, and ultimately to organization of the new products "choking" the vessels and nerve fibres. By way of treatment he recommends tonics, quinine, iron, and cod liver oil, the hypodermic injection of strychnia locally, and the use of the continuous current; the uterine functions should be attended to.

Clitoridian Crises and Crises of Muscular Fatigue in the Onset of Locomotor Ataxy.—Prof. Pitres, of Bordeaux, in the *Jour. de Med. de Bordeaux* (*Jour. de Med. et de Chir.*), gives two interesting cases which illustrate the clitoridian crisis as first described by MM. Chuveot and Bouchard, in 1866. The first case was in a patient aged 48 years, where the disease made its appearance with relatively slight gastric crises. Twice a month, without any physical or psychical provocation, the patient felt a pleasurable sensation in the clitoris, which persisted, increasing in intensity, from a quarter of an hour to twenty minutes, and then terminated by a complete erotic spasm, with an abundant vulvo-vaginal secretion. This took place sometimes in the day, sometimes at night, and with no prodromata. The erection of the clitoris ceased soon after the ejaculation, and left behind no especial fatigue. The second patient was 32 years of age, and subject for some time to very acute pains in the head, which were taken to be neuralgic. With her, clitoridian crises were preceded by a violent beating of the heart; then the genital organs became the seat of voluptuous sensations, resembling those felt in coitus. The crisis terminated by an abundant vulvo-vaginal secretion, after which the patient remained exhausted for some minutes. These crises were reproduced four or five times a month for ten years, coming on indifferently by day or night, and unprovoked by any erotic ideas. They often attacked the patient while occupied with her household duties, or when sitting down. A year later the ataxy was definitely confirmed, and the clitoridian crises disappeared as the fulgurating pains became established in the lower limbs.

The crises of muscular fatigue have never been systematically described. Certain patients, at the onset of progressive muscular ataxy, complain of well-marked attacks of muscular fatigue, which occur suddenly, without appreciable cause, persist for several hours or days, and pass off without leaving any persistent fatigue behind. These attacks recur at variable intervals, day by day, week by week, or at longer periods. The pains which characterize them are not acute, lancinating, or shifting, like fulgurant pains. They consist in a painful sensation of lassitude and muscular fatigue, as if the patient had been subjected

to a too violent or prolonged physical exercise (fencing, riding, or swimming). This sensation has its seat in the muscles of the limbs or of the sacro-lumbar region. It is sometimes so severe as to compel energetic and vigorous subjects to lie down in the middle of the day, and to rest in the decubitus-dorsal position until the attack passes off. These crises may continue for many months or years, as the sole morbid symptom recognized by the patient. In the three cases cited by M. Pitres, they preceded the more positive signs of tabes, after the development of which they disappeared.

The practical application of the foregoing is that these crises are sufficiently marked and positive in their character as to allow of a diagnosis of progressive locomotor ataxy, in the absence even of any evidence of incoördination of movements.

ANILINE DYES.—Prof. Poincaré, of Nancy, gave to the Hygienic Congress at the Hague this year the results of his experimental researches upon the effects of the aniline colors (*L'Art Medical*). He found the following to be perfectly harmless; blue, yellow, orange, cachou, brown, Java indigo, sulpho-naphthalate of calcium, methyl blue, chrysome, sulphonilic acid, naphthol eosine, rocelline, methyleosine, erythosine, fluoreosine, sulphi-naphthol, and naphthionic acid.

The following produced death: Saffron, Hoffman's violet, parotoluidine, acetonilide, violet, phtalic acid, picric acid, diphenylamine, orthotoluidine, naphthylamine, binitro-benzine, binitro-toluene, resorcine, green.

Anthrasene and ponceau gave serious disturbances, as also chrysoid, fuschine, toluene and dimethylaniline—the latter of which sometimes produced death.

None of these substances produced the marked effect upon the temperature as described by writers. Among the non-toxic substances only one, sulphonilic acid, produced a lowering of the temperature. On the contrary, nearly all the toxic substances lowered the temperature curve, among the most marked of which were the acetonilide, violet, parotoluidine and Hoffman's violet. Emaciation was produced with but four of the non-toxic substances, and with them it was insignificant.

There was a marked analogy in the symptoms produced, the most constant of which were as follows:

(a) A great interference with movements, developing into a paresis, and even a more or less general paralysis. Paresis was absent in but two substances; orthotoluidine and toluene. The toluene produced an increase of activity in the muscular force.

(b) Convulsive tremblings most marked with ponceau, toluene and dimethylanine.

(c) Coma, which was very marked with ortholuidine, binitro-toluene and dyphenylarime.

(d) Dyspnœa accompanied with tracheal râles with toluene and sapranine, and violent cough with Hoffman's violet and dimethylaniline.

(e) Irregularities in the heart beat, particularly with toluene.

(f) Anæsthesia which was only noticed with orthotoluidine.

Speaking generally the derivatives of toxic aniline have rarely altered in an appreciable manner the histological elements, and seem to have produced death by altering the composition of the blood and interfering with vascularization.

The principal practical conclusions are: 1. The use should be interdicted in the coloring of children's playthings, foods, wines and liquors, of such of these substances as are recognized above as toxic, particularly as they are very often combined with arsenic, lead or mercury. 2. These toxic substances may be tolerated in the coloring of tissues and papers, but on the condition that they are perfectly fixed. The rules which follow are for the guidance of workers in these dyes.

In the ensuing discussion M. Napias called attention to the activity of these dyes in a state of powder or dust, particularly *eosine*, the effects of which in workmen who manipulated this substance, he had noticed in the form of erythematous and papular eruptions, with irritations of the mucous membranes. Unfortunately those colors which are not toxic in themselves are made so by combination with lead.

M. Clonet, in confirming the preceding statements, had observed that these aniline colors were without bad effect when in a state of solution on account of the minute proportion of the coloring principle present, but when simply deposited upon the tissue and not fixed in the fibres of materials, they are absorbed in the powdered state. But, particularly regarding the action of fuchsine, he believed it to be innocuous if the aniline was pure. He, with some of his students, have taken up to 40 grammes in the course of a few days without producing any bad effects. In the case of one of his students where the urine was examined to determine if fuchsine was eliminated by the kidneys, the urine was found to be albuminous, but ceased to contain albumen on the fourth day of the experiment. A similar experience has resulted in the administration of this substance to hospital cases representing different forms of albuminuria. As to non-arsenical *grenat*, it has been taken in larger doses than fuchsine by some of the students, with no other bad effect than vomiting, caused by the repugnance it provoked.

NAPHTHALINE IN DIARRHŒA AND CYSTITIS.—For the last three years Professor Rossbach, of Jena, (*Med. Press*) has employed naphthaline in all cases of diarrhœa that have come under his care. He concludes that it is of great service in all cases of chronic intestinal catarrh, with or without ulceration, attended by chronic diarrhœa, and in all cases the stools in the course of from five to fifteen days become of normal frequency and consistence. Some of the naphthaline given passes over into the urine, and the effect in the case of urinary trouble was noted to be exceedingly favorable. Pus, blood, and vibrionis quickly disappear from the urine after its administration. It was given in doses of 2 to 3 grm. per day. After half a grain daily the appetite was often improved.

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THE EDITOR of this JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information, should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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SATURDAY, DECEMBER 13, 1884.

THE NEXT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—We hear from various sources intimations that a movement has been started to change the time of the meeting of the Association in New Orleans, which was appointed to commence on the last Tuesday in April next, to an earlier day. The reasons given for the proposed change are, that the International Cotton Exposition is to close on the 1st of May, only four days after the time appointed for the Association to meet, and that the last week in April is likely to be too warm for the comfort of the members. The first of these reasons is simply an error, as we are assured, on the very best authority, that the Exposition will not close until the first of June. We think, also, the apprehensions in regard to high temperature are without foundation. The Association held its meeting in New Orleans in 1869, commencing on the first Tuesday in May, one week later than the time appointed for the meeting next spring; and yet the weather was exceedingly pleasant and genial. We have nowhere spent a more comfortable week than in New Orleans during the first week in May, 1869. When at Washington the Association was invited by the profession of New Orleans to hold the next annual meeting in the latter city, the time agreed upon was that suggested by the representatives extending the invitation. And certainly no attempt should be made to change the time now, unless such change is asked for by the local Committee of Arrangements, on which devolves the duty of making all necessary provision for a profitable meeting of the Association. So far as we are informed, that committee desires no change in the time. On the contrary, its members would regard a change to the first week in April as very objectionable in every respect.

MEDIASTINAL TUMORS.—Tumors of the mediastina possess more of a pathological than of a clinical interest. This is particularly true of new growths which invade the heart either primarily or secondarily. Until the researches of Virchow declared their real nature, mediastinal tumors were regarded for the most part as being carcinomatous. It is now known, however, that in the majority of instances they are sarcomatous or lymphosarcomatous. Very rarely the heart may be the seat of both cancer and sarcoma, but tumors in this situation are generally secondary. So slight are the symptoms they sometimes occasion, that their presence is not even suspected and is only discovered *post-mortem*. In all cases, where the probability of their existence is entertained, a positive diagnosis is extremely difficult. As a matter of pathological interest, and to illustrate the impossibility many times of differentiating new growths from valvular or other organic disease of the heart, we give some facts communicated by P. Liborius to *Virchow's Archives*, 93, page 401, and recapitulated in *Centralblatt f. d. Med. Wiss.* Oct. 4, S. 702.

In the course of twelve years, 7,566 autopsies were made at the Marine Hospital of Kronstadt, and in but 31 cases were sarcomatous tumors discovered. Four of these implicated the heart and pericardium, as follows:

The first narrated by Dr. Liborius was the case of a vigorous, well-built sergeant of marines, aged 34 years. The first symptom referable to a mediastinal tumor was experienced seven months antecedent to his death, and consisted of a moderate pain in his left side and left arm. This pain disappeared after a few days. Three months later a physician discovered an impurity of his heart sounds. After the lapse of another month the man was seized with acute articular rheumatism which gradually subsided, leaving an obstinate cough behind. Upon his entrance into the hospital, five weeks prior to his death, he presented the following signs and symptoms: Dyspnœa, cough, cyanosis of the face and upper extremities; the cardiac impulse, in the fifth space, was weak, and the feeble heart sounds were accompanied by a systolic murmur; precordial dullness was increased transversely. Subsequently the *sputa* became bloody, dyspnœa increased; the cardiac dullness advanced to the left anterior axillary line, the left arm and lower extremities became œdematous, and the patient grew

delirious the day before his death. No diagnosis had been possible *intra vitam*. The necropsy revealed a teleangiectatic, round-celled sarcoma, as shown by the microscope, and having in places quite a luxuriant development of connective tissue. The tumor was almost as large as a man's head, and had its seat in the pericardium, by which it was nearly enveloped. Superiorly to the left, it had perforated the pericardium, to which at this point it was intimately adherent. The sac of the heart was implicated in the process to a considerable extent. The heart had been pushed to the right and compressed. Two small tumors were also found in the upper lobe of the left lung. Liborius thinks the growth originated in the pericardium, and not in the lymphatic glands nor loose areolar tissue of the mediastinum. This case is remarkable because of the almost entire absence of pressure and other signs, such as dilatation of veins, enlargement of lymphatics, etc. Circumscribed œdema was a late symptom. Indeed, the disease might easily have been mistaken for a valvular one, resulting from the acute inflammatory rheumatism. The extension of cardiac dullness to the left of the mammillary line was too rapid, we think, to be referred to dilatation of the left ventricle. It would be interesting and instructive to know the exact character and the point of maximum intensity of the systolic murmur. The case certainly carries an important lesson for diagnosticians.

In another man, thirty years of age, the autopsy revealed a myeloid sarcoma, twelve to thirteen ctm. in diameter, located in the posterior mediastinum. It had perforated the superior vena cava and likewise forced its way into the right auricle and right ventricle, having occasioned thrombosis of all veins emptying into the descending vena cava and of the right femoral vein. There were double hydrothorax, œdema pulmonum, and subcutaneous dropsy of the whole body.

In this case diagnosis must have been less difficult, since it is likely the tumor gave rise during life to a circumscribed area of dullness between the *scapulæ*. Cardiac murmurs probably existed and must have been interesting.

In a woman fifty years of age a spindle-celled sarcoma was found situated on the right auricle. It was as large as a man's fist, nodular, of firm consistence, and had eaten into the heart-muscle. The inner surface of the auricle was thickly studded with concretions of a nature not stated, some of them of the size of a pigeon's egg. Numerous secondary growths also existed. Here too, it would be instructive to learn whether or not signs referable to the heart had been noticed in life.

In the fourth case, a woman seventy-six years of age, a round-celled sarcoma of considerable size existed in the posterior mediastinum, while the inner surface of the left half of the pericardium was closely studded with secondary growths, some of them as large as hazel-nuts. It is unfortunate that it is not stated whether or not in this instance the growths had given rise to pericarditis and pericardial friction sounds, since this result is said to be produced by carcinoma, not by sarcoma of the pericardium.

DR. ABRAM GROESBECK, one of the oldest and most honorable members of the profession in this city, died on the 24th of November, 1884, at the age of 74 years.

He had practiced medicine with fidelity and success half a century; was a well educated man, with all the qualities of a true gentleman, and highly esteemed by all who knew him. Appropriate notice of his death was taken at a recent meeting of the Chicago Medical Society, the proceedings of which we shall give in our next issue.

DR. J. G. THOMAS, of Savannah, Ga., a member of the General Committee on the Organization of the International Congress of 1887, who was taken severely sick before his arrival in Washington to attend the recent meeting of the Committee, died in the latter city on the 6th inst. A further notice will be given in the next issue of the JOURNAL.

DR. MAHOMED, formerly secretary of the general committee of the British Medical Association on the Collective Investigation of Disease, died in London, Nov. 22, 1884, of typhoid fever. Dr. Mahomed was an able and active worker in the profession, and his death will be greatly regretted on both sides of the Atlantic.

INTERNATIONAL MEDICAL CONGRESS.—The official proceedings of the first meeting of the General Committee on the Organization of the International Medical Congress for 1887, will be found under the head of miscellaneous matter in the present number of the JOURNAL.

MISPLACED.—In the Paris letter, published in the JOURNAL for Nov. 6, 1884, two lines that belong at the bottom of the second column of page 530 the printer has placed at the bottom of the first column of page 531; a dislocation which is well calculated to puzzle the reader.

SOCIETY PROCEEDINGS.

REPORT OF PROCEEDINGS OF THE ILLINOIS STATE BOARD OF HEALTH.

QUARTERLY MEETING, NOV. 20–21, 1884.

The regular quarterly meeting of the State Board of Health of the State of Illinois was held in the rooms of the Board in the Capitol building at Springfield, Nov. 20–21, 1884.

Present, the Hon. Newton Bateman, President of the Board, and Drs. Clark, MacKenzie, Kreider and Rauch.

After the reading and approval of the minutes of the last meeting the Board went into executive session, for the consideration of charges against certain practitioners under the Medical Practice Act.

At the evening session the Secretary presented the following

QUARTERLY REPORT.

During the quarter ended Sept. 30, 1884, there were received in the Secretary's office 1,623 communications, letters, reports, etc., and 3,472 letters, postals and other written communications were sent out. Of printed matter there were distributed 2,689 copies of the Fifth Annual Report and upwards of 200,000 copies of other printed matter—the mail and express packages sent out during the quarter aggregating 8,982 pounds' weight, or over four tons.

Among the more important written and printed documents distributed were those concerning the vaccination of school children, sent to about 12,000 school districts, through the County Superintendents:

Concerning the Sanitary Inspection of Public Buildings—especially of Almshouses, Jails and similar institutions—sent to County Commissioners, Boards of Supervisors and other officers:

Concerning the Sanitation of Railway Buildings, Grounds and Travel, sent to the General officers of thirty-three Railway Companies operating in this State:

Concerning Preventable Diseases, sent to localities in which Small-Pox, Scarlet Fever, Diphtheria or Typhoid Fever appeared.

In connection with these latter circulars, the blanks for Reports of Epidemic Diseases have been revised, and a new edition has been partly printed, together with a circular of instructions for their use.

A pamphlet of 51 octavo pages has also been prepared, printed and distributed, containing the Public Health Laws of Illinois; the Form of an Ordinance for the Protection of the Public Health, suggested for adoption by communities which have no health organization, and for substitution for existing health ordinances which have been found defective or inoperative; Rules and Regulations concerning Contagious Diseases; concerning vaccination; concerning the Sanitation of smaller Cities and Towns; and concerning the Principles and Practice of General Sanitation.

MEDICAL PRACTICE.

State certificates, entitling to practice medicine and surgery in Illinois, were issued to 105 graduates, 88 of which were granted unconditionally upon the diplomas of medical colleges in good standing; 6 upon examination in omitted branches, to graduates of colleges which had not fully complied with the schedule of minimum requirements of the Board; and 11 upon presentation of evidence of proper preliminary education, to graduates of colleges, otherwise in good standing, but which had not yet enacted a matriculation examination at the beginning of the session of 1883–84. There were also issued 8 duplicate certificates upon affidavits of the loss or destruction of the originals, and one certificate based upon length of practice in the State.

To midwives 6 certificates have been issued upon the diplomas or licenses of recognized schools of midwifery, and 3 upon satisfactory examination.

QUACKS AND DISREPUTABLES.

With the exception of those in Chicago, the fraudulent advertising quacks and disreputable specialists seem to have been pretty well weeded out of the State. For the first time since the passage of the Medical Practice Act there have been no complaints received concerning this class, except as above indicated.

After repeated attempts a grand jury was at last found which indicted eleven of the more prominent of those in Chicago during the month of July, but thus far none of the number has been convicted.

The noted quack, R. C. Flower, of Boston, Mass., has finally abandoned his efforts to secure a foothold in Chicago. By means of insidious and plausibly-worded advertisements, frequently of over a column in length, he succeeded in doing quite a thriving business for a time, and charged the most exorbitant fees. Unable to comply with the law and obtain a State certificate, and being refused an itinerant license, he was compelled to make appointments with his patients at Michigan City, in Indiana, and at Davenport, in Iowa, only venturing to stay in the State for a day or two at a time, and leaving before his arrest could be effected. Some of his dupes and victims have lodged complaint against him, and are now anxious to secure his arrest and punishment.

The suit of Frank B. Smith, one of the "K. and K. Surgeons," against the Secretary of the Board, for $50,0000 damages, alleged to have been sustained by the revocation of his certificate by the Board on charges of unprofessional and dishonorable conduct, and which suit was brought at Detroit, Mich., in the United States District Court, has been dismissed, and the plaintiff mulct in costs.

THE PUBLIC HEALTH.

Small-pox, noted as existing in isolated localities in the southern portion of the State at the date of the last report, was practically extinct at the close of the quarter, with the exception of a few cases in Marshall county, the contagion of which was introduced from Indiana. Reports of a serious epidemic of the disease in Ballard county, Ky., threatening Cairo and the line of the Illinois Central Railroad, led me to

visit the locality early in August, after communicating with the Secretary of the Kentucky State Board of Health. The precautions necessary to protect the threatened region of our own State were instituted, and these were efficiently supplemented by the action of the management of the Illinois Central, under the direction of the Superintending Surgeon, Dr. John E. Owens.

Notwithstanding the freedom of the State from this disease at the present time, and its subsidence abroad, the necessity for vaccination and re-vaccination in all localities where there are still unprotected individuals is likely to become apparent upon the approach of cold weather; and it is incumbent upon local health authorities to secure the fullest protection in season.

There has been a diminution in the prevalence of scarlet fever during the quarter, but toward its close there is noted an increase of diphtheria and of typhoid fever. The demand for the Preventable Disease circulars of the Board has, in consequence, been much greater than usual, and that on diphtheria has been reprinted, in part or whole, by many newspapers.

In response to a telegram from Dr. Salmon, the Veterinary Expert of the Department of Agriculture at Washington, I went to Peoria on the night of the 17th of August, and on the following day examined some cattle suspected of being infected with pleuropneumonia. The post-mortem examination of one of these animals confirmed the diagnosis, and since that date the disease has been detected in several other localities. Occasional cases continue to be reported, but the State Veterinarian believes the outbreak is in a fair way to be suppressed. The necessity for additional legislation on the subject of the contagious diseases of animals, already suggested from time to time in these reports, is emphasized by this outbreak.

SANITARY INSPECTION AND WORK.

The results of the efforts made in accordance with the instructions of the Board at the last quarterly meeting, to secure a general inspection and improvement of sanitary conditions, have been very gratifying. Reports from two hundred and thirty cities, towns and villages have thus far been received in reply to the circulars sent out, and an immense amount of work has already been accomplished in remedying the defects disclosed by the inspection. In many localities it is known that the reports are deferred until the completion of work already being pushed forward in anticipation of the advent of cholera next year.

I have personally inspected a number of State institutions, and find them in as good condition as could be expected, in view of obvious faulty construction or location, from a hygienic standpoint. Such suggestions of improvement as I have found it necessary to make, have been carried out as far as practicable.

Responses to the special circular concerning Railway Buildings, Grounds and Travel, have been received from sixteen companies, comprising the more important of all the roads operating in Illinois.

On the whole, there is cause for congratulation in the progress already made in this effort of the Board to secure the best attainable sanitary condition of the State as the most efficient and valuable mode of warding off the epidemic of Asiatic cholera.

It is to be wished, however, that the newspaper press, especially in the smaller cities and towns, would devote some of their space to articles urging the fundamental importance of individual sanitary effort. Without this, boards of health and health officers are, to a great extent, inadequate to cope with some of the more serious evils. A large portion of the community needs to be taught that personal cleanliness, and cleanliness of the household and premises, are among the highest results of sanitary science, and that, of themselves, they constitute the best safeguards against contagion and preventable disease.

RECOMMENDATIONS AND SUGGESTIONS.

The following recommendations and suggestions are respectfully submitted:

First—That a thorough sanitary survey of the State be inaugurated not later than the 1st of January, 1885, under the direction of the Board.

Second—That a committee of the Board be appointed to prepare revisions and amendments of the laws of the State regulating the practice of medicine, and concerning the protection of the public health. The defects of the statutes concerning both these subjects are patent, and should be remedied as speedily as practicable.

Third—That action be taken in anticipation of the forthcoming meeting of the National Conference of the State Board of Health, with reference to the subject of Asiatic cholera.

JOHN H. RAUCH, Secretary.

Upon the conclusion of the reading, on motion of Dr. Clark the report was accepted, the recommendations and suggestions were taken up for consideration, and the following action was had:

SANITARY SURVEY OF THE STATE.

Dr. Kreider submitted the following resolution, which was adopted:

Resolved, That the Secretary be authorized to prepare the necessary blanks and instructions, and to distribute the blanks to the proper authorities of counties, townships and municipalities, for a thorough and systematic sanitary survey of the State, to be begun by January 1, 1885, or as soon thereafter as practicable.

The Secretary explained that it was proposed to begin work in the southern portion of the State and to work northward as rapidly as the weather would permit, so that by the 1st of May, the sanitary condition of every dwelling, in all of its parts, of all premises, outhouses, wells, cisterns, and other belongings, should be made known, the remedy of defects be pushed, and the authority of the Board be exerted wherever necessary to supplement the efforts of local authorities in the preparation of the State to resist the threatened invasion of Asiatic cholera.

NATIONAL CONFERENCE ON ASIATIC CHOLERA.

With reference to the forthcoming meeting of the National Conference of State Boards of Health to be

held in the city of Washington, December 10th, prox., to consider the subject of Asiatic cholera, Dr. Clark offered the following preamble and resolutions which were adopted:

WHEREAS, The members of this Board, having carefully considered the able and exhaustive paper upon the Exclusion and Prevention of Asiatic Cholera in North America, prepared by the Secretary of the Board, find the argument set forth abundantly supported by incontestable facts duly cited in the text, and believe its conclusions and recommendations to be comprehensive, practical and sufficient; and

WHEREAS, This subject is the most important of any which now demands the attention of those charged with the protection of the public health—involving as it does, the prevention of a great sacrifice of human life, of an immense money expenditure, and of serious and wide-spread injury to commerce, manufactures and all other industries—therefore, be it

Resolved, That a committee be appointed to draft a formal expression of the views of the State Board of Health of Illinois concerning the measures which should be adopted and enforced by municipalities, State and the National Government for the protection of the country against an invasion of Asiatic cholera.

Resolved, That the action of the National Conference of State Boards of Health, held at St. Louis, October 13–15, 1884, on the subject of Asiatic cholera be, and the same hereby is, approved and endorsed by this Board.

Resolved, That the Secretary of this Board be authorized to attend the forthcoming meeting of the National Conference in Washington, D. C., and present to said Conference the action of this Board as above indicated.

On the motion of Dr. MacKenzie, the Chair was authorized to appoint the committee, to consist of five members, including the President as Chairman of the committee. Drs. Haskell, Clark, MacKenzie, and Rauch, and the Hon. Newton Bateman were thereupon appointed as members of the committee.

REVISION OF THE LAWS.

On motion of Dr. Kreider, the President appointed a committee, consisting of Drs. Rauch, Haskell, Kreider, Clark and MacKenzie, to prepare revisions and amendments of the laws regulating the practice of medicine and concerning the public health, to be submitted to the next General Assembly.

During the executive session of the Board the case of Dr. Ed. S. McLeod, of Chicago, was considered. The following extract from the formal notification citing McLeod to appear before the Board, and show cause why his certificate should not be revoked for "unprofessional and dishonorable conduct" sufficiently explains this case:

"The charges against you are that you ply your vocation by means of fraudulent and deceptive advertisements, under assumed names, to-wit: under the alias of "Dr. James" and "Dr. Lucas;" that in order to secure patients you hold out inducements and promises and make suggestions which in themselves tend to promote crime and immorality; that you publish and distribute, through the United States mails and otherwise, to all classes of the community, including the youth of both sexes, obscene circulars and pamphlets, for which you have already been once indicted in the United States District Court, at Chicago, when you pleaded guilty, were fined $500 and costs, and your plates and circulars were seized and destroyed by the United States authorities: That such fraudulent, deceptive and demoralizing practices constitute "unprofessional and dishonorable conduct," within the meaning and intent of the statute, which was enacted for the protection of the people from the ignorant and unscrupulous under the guise of medical practice."

Upon mature deliberation and careful consideration of the evidence offered in support of the charges, the certificate of Dr. Ed. S. McLeod was ordered to be revoked.

After the transaction of the regular routine business, and auditing of accounts and bills amounting to $2,876.55, the Board adjourned.

STATE MEDICINE.

STATE BOARD OF MEDICAL EXAMINERS FOR VIRGINIA.

To the Editor of the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION:

The enactment of a law regulating the practice of medicine and surgery in Virginia was noticed in your columns some months ago. At the annual meeting of the Medical Society of Virginia in September last the names of two physicians from the State at large and three from each congressional district (thirty-two in all) were presented to the Governor, in accordance with the provisions of the law, and on Nov. 1 these gentlemen were duly commissioned as "Medical Examiners." In pursuance to the call of the Governor, the first meeting of these examiners was held on Saturday, Nov. 15, for the purpose of organizing and adopting some plan of examination.

It was deemed most important, in view of the number of examiners in the State, and the further fact that a candidate could select any three members of the Board whom he might prefer to conduct his examination, that some plan should be adopted which would make the examinations uniform. With this view a *blank form* for questions was adopted, which provides for six questions on chemistry, eight on anatomy, eight on physiology, four on hygiene, fifteen on materia medica and therapeutics, six on obstetrics, twenty on practice, and twenty on surgery. A clinical examination is also to be required when practicable. "Each examiner is required to ask a question for each number under each branch or subdivision, and to write out the question opposite the number; the blanks thus filled out are to be forwarded to the President of the Board, along with the

written answers to the questions" (and such questions and answers are to be read out before the Board at the annual meeting). "The applicant is required to answer three-fourths of all the questions on each subject satisfactorily." All applicants for practice in the State of Virginia who have not taken out a license prior to Jan. 1, 1885, will be required to pass a satisfactory examination before the Board in session, or any three members thereof whom the applicant may select. The result of this examination is reported to the President, who, if the result be satisfactory, issues the applicant a license.

WM. C. DABNEY, M.D.

Charlottesville, Va., Nov. 20, 1884.

HEALTH IN MICHIGAN, NOVEMBER, 1884.

Reports to the State Board of Health, Lansing, by observers in different parts of the State, show the diseases which caused most sickness in Michigan during the month of November (4 weeks ending Nov. 29), 1884, as follows:

Number of Weekly Reports Received, 172.		For Preceding Month.
Diseases Arranged in Order of Greatest Prevalence.	Per Cent. of Reports Stating Presence of Disease.	Per Cent. of Reports Stating Presence of Disease.
Neuralgia	72	64
Rheumatism	70	67
Bronchitis	67	56
Intermittent fever	60	72
Consumption of lungs	58	60
Tonsillitis	58	44
Diarrhœa	46	75
Remittent fever	44	52
Influenza	42	37
Typho-malarial fever	35	36
Pneumonia	29	22
Erysipelas	27	28
Typhoid fever (Enteric)	22	25
Diphtheria	19	22
Inflammation of bowels	19	22
Scarlet fever	13	9
Whooping-cough	13	16
Cholera morbus	12	31
Membranous croup	10	8
Dysentery	10	44
Cholera infantum	8	28
Inflammation of brain	8	8
Measles	6	6
Puerperal fever	6	5
Cerebro-spinal meningitis	4	7
Inflammation of kidney	2	22

For the month of November, 1884, compared with preceding month, the reports indicate that tonsillitis, bronchitis, neuralgia, and pneumonia increased, and that dysentery, diarrhœa, cholera infantum, inflammation of kidney, cholera morbus, intermittent fever, and remittent fever decreased in prevalence.

Compared with the average for the month of November in the six years, 1879–1884, diarrhœa was more prevalent, and diphtheria, intermittent fever, and consumption of lungs, were less prevalent in November, 1884.

For the month of November, 1884, compared with the average of corresponding months for the six years, 1879–1884, the temperature was slightly lower, the absolute humidity and the day and the night ozone were less, and the relative humidity was more,

Including reports by regular observers and others, diphtheria was reported in Michigan in the month of November, 1884, at 40 places, namely: Adrian, Alton, Armada, Bloomingdale, Byron, Big Rapids, Constantine, Cooper, Decatur, Detroit, East Saginaw, Evangeline, Fruitland, Grand Rapids, Hastings, Howard City, Kalamazoo, Lansing, Leeland, London, Muskegon, Manistee, Mendon, Orange, Penconning, Portland, Port Huron, Portage, Pontiac, Romeo, Richmond, Smith's Creek, Schoolcraft, Vicksburg, Vernon, Vergennes, Vassar, Wyandotte, Warren, Watervliet. Scarlet fever at 22 places: Albion, Algonac, Armada, Brockway Center, Cadillac, Center Plains, Detroit, East Saginaw, Freesoil, Grand Rapids, Kalamazoo, Lansing, London, Manistee, Muskegon, North Muskegon, Pontiac, Portland, Roxand, St. Johns, Vassar, Vicksburg. Measles at six places: Detroit, Grand Rapids, Kalamazoo, Port Huron, St. Joseph, and Whitehall.

HENRY B. BAKER,
Secretary.

Lansing, Dec. 5, 1884.

FOREIGN CORRESPONDENCE.

BERLIN LETTER.

BERLIN, Nov. 18, 1884.

GYNÆCOLOGY.—Dr. Schroeder admits no one to his laparotomies without an especial invitation. The person invited is requested to bathe thoroughly before coming, and to wear a suit of clothes which has been aired, and which has not been in general use. I saw him make a gastro-hysterectomy at half-past seven on the morning of the 15th (most of the operative work is done here in the early morning). The operation lasted one hour and three-quarters, and varied in no essential particular from the routine which I have already described in the *American Journal of Obstetrics*. The actual cautery was used to the stump, and a 10 per cent. solution of carbolic acid was made use of. The stump was well protected by its flaps, so that there was no oozing, and it was then dropped into the cavity. The professor is most ably seconded by his first assistant, Dr. Hofmeir, who has already made a reputation as a clever operator. No drainage-tube was used. On the day previous I saw Dr. Schroeder amputate the cervix *very* high up, so high indeed that the operation was as severe as the supra-pubic measure would have been for carcinoma. At one of the clinics a student was asked what treatment he advised in the case of a woman who had a tumor of the wall of the uterus near the ovary, and another higher up. He answered, "Extirpation." The professor said that he could not have given a more faulty answer—that change of life would relieve her in time, and one should operate only when hæmorrhage is dangerous, or when the woman herself urges the operation, stating that unless it is done she will be unable to earn her living. He has had *three* deaths from the intra-uterine injection of corrosive sublimate. The last one was only one litre of a 1-1000 solution. He says that he cannot believe with the

Americans, that extirpation of the uterus is a needless and dangerous operation. He has had only 25 per cent. of deaths in his cases, and if we do not extirpate, the woman will die anyway. Dr. Landau has given some exceptionally interesting clinics. He limits the number of medical men, so that each one has every facility for examining the cases and forming a diagnosis. Several cases of uterine hæmorrhage, just such instances as come up every day in the routine of the general practitioner, have been treated with uterine injections of *strong* liq. ferri.

In 500 cases Dr. Landau has never had but one case of uterine colic, resulting from these injections, and that occurred a short time ago when I was present. The woman was bleeding from what proved to be a small piece of retained placenta. The womb was curetted and injected. The bleeding still continuing another injection was made, and this was followed by colic. It was very amenable to treatment. Dr. Landau took this occasion to say that there was never any danger in dilating the canal when the woman was narcotized. He never uses intra-uterine injections of *ice-water*, because the effect is only temporary. He has frequently used hot water, but prefers liq. ferri. Dr. Martin injects water almost boiling into the uterus and then takes a stitch through the cervix to keep it in. Many cases of dislocated uteri were treated, and Dr. Landau impressed upon those present that in cases of retroversion, the uterus should be pressed to one side so as to clear the promontory of the sacrum, before it was carried up. Otherwise restoration would be impossible. He showed one case of great interest. He had operated upon a woman some years before for floating kidney containing a large abscess. There is still a fistula in the side from which urine escapes. She urinates also through the natural passages. This case is cited in his brochure, "Die Wanderniere der Frauen," which is the best work I know of on floating kidney. Dr. Gusserow's case of ovariotomy died within twenty-four hours. He has operated for laceration of perinæum for procidentia with partial prolapse of bladder and prolapse of vaginal walls, and has done some interesting work in the lying-in wards. He had one case of a woman with cancroid uterus three months advanced in pregnancy.

Eye Diseases.—Prof. Dr. Hirschberg lives and has his private hospital at 36 Karl street, where he lectures, operates, receives dispensary cases, etc. His operative hours are between 9 and 10 A.M., and only a few invited students are ever present. His public lecture is from 12 to 1, and here he has cases illustrative of his address. The poli-klinik between 1 and 3, corresponds to the dispensary service in New York. His private hours are from 3 to 4. Prof. Sweigger has his poli-klinik in Ziegel street. Both are popular, both have hosts of students. Dr. Schoeler has also a poli-klinik and gives an operative course, as does also Dr. Hertsmann. Fraenkel gives an interesting *cursus* on the throat, and Leucæ on the ear. The latter lectures once a week, and is extremely practical and satisfactory.

Medicine.—Prof. Frerich's clinics in Charité are so crowded that one must go early to secure a seat. Virchow says that he never makes a mistake. He makes a diagnosis rapidly, and his lectures are of the greatest possible interest. On the subject of erysipelas he said that he had used injections of carbolic acid, but with no good results, and until we shall know more of the disease we must govern our treatment by symptomatology. *Interstitial Hypertrophy* of the liver he said was always due to one of four causes: 1. Alcohol. 2. Syphilis. 3. Malaria. 4. Transmitted inflammation from the gall bladder.

Prof. Leyden said in one of his lectures on diphtheria, that the treatment may be divided into three heads: 1. The internal antiphlogistic (quine sal. of sodium, etc). 2. The nourishing (wine, egg, alcohol and milk). 3. Specific (corrosive sublimate, chlorate of potash, carbolic acid, and iron). He classed dropsies under three heads: 1. Those due to congestion. 2. Those due to Bright's disease. 3. Those due to cachexiæ.

Skin Diseases.—Dr. Laisar has his private hospital and poli-Klinik on Karl street, 19. He has students from all parts of the world, and as he speaks English and is very jovial he has many disciples among Americans. He showed me a photograph of a case molluscum-fibronem of a carcinomatous nature. His treatment of scabies is as follows: He has several private bath-rooms, conveniently arranged for all kinds of treatment. A tub of water is charged with a small amount of corrosive sublimate. The patient is stripped, rests quietly in the bath for ten minutes, being careful to keep all parts of the body covered with water. The nurse then washes him all over with green soap, washes it off, and then goes through the same process again. Then the entire body is covered by a paint brush with a preparation of the oil of cade in alcohol. This is washed off as far as possible with green soap, when the patient gets out of the bath, and is thoroughly dried. Then the entire body is covered with an ointment of naphthol, sulphur, green soap, and simple ointment, and the patient is told to dress, and to wear the same underclothes until termination of treatment. The latter application is extremely painful, and its effects must be carefully watched.

General Medical News.—Dr. August König is lecturing upon the color sense, and the effect which the combustion of various metals has upon pigmented paper. Sodium and barium in a Bunsen burner were thoroughly tested. He gave the reflection of various media. At an angle of 50° water reflects about 50 per cent. of light, at an angle of 90° it only reflects 2 per centum. Glass reflects 60 per cent. at an angle of 5° and only 20 per cent. at an angle of 90°. Metal reflects from 60 to 90 per cent. at all angles.

Medical Societies. — At the meeting of the Medical Society on the evening of Nov. 12, Prof. Virchow was re-elected President, and Professors Küster, Fraenkel, Senator and Abraham were re-elected Secretaries. Dr. Falk was re-elected Librarian. The discussion on Diptheria being resumed, Prof. Virchow said that he thought the difference between croup and diphtheria was one of symptoms, and not of membrane. He doubted if physicians

could always tell, in any given case, whether it fell under the head of the former disease or of the latter. He thought that stripping off the membrane was bad practice.

OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—Held on Nov. 14, at the Woman's Hospital on Artillerie street, No. 13. Dr. Veit read a paper on "Tubal Pregnancy." Dr. Schröder, on "The Surgical Treatment of Pruritis Vulvæ," said that, of course, he did not intend urging it in every case. That when it depended upon irritating fluids or from parasites, operative interference was not demanded. But there were many cases which, if examined closely, would disclose little white swellings. If these are excised the pruritis disappears. He cited the following cases: 1. Upon close examination he found a small malignant growth of the clitoris. Surgical treatment cured the itching. Five years have now gone by, and the patient is still well. 2. Labia majora of left side hypertrophied. A part was excised, and the patient felt better. Shortly after the labia on the right side took on the same condition, and the same treatment was resorted to. The patient is now well. 3. Enlargement of labia minora; surgical treatment; cure. 4. Itching began at anus, extending up to mons veneris. The skin around the anus was thick and hardened from scratching. Small pieces were excised from around the anus, labia majora and mons veneris. The patient recovered entirely. H. R. B.

BERLIN, Nov. 13.

MR. EDITOR:—The Royal Frederick William University is in full operation for its winter semester, and has more students than in former years. Quite a little excitement has just been produced by the appointment of Prof. Schweiniger as "Director of the section of skin diseases at the Royal Charité." He is Prince Bismarck's "Leibarzt," and on account of services rendered the Prince, the departments of Dermatology and Syphilis, previously held by Prof. Levin, have been separated. Some six or seven hundred students assembled about the building where Prof. Schweiniger was to have his first lecture, but he admitted only fifty, and much excitement prevailed. N.

DOMESTIC CORRESPONDENCE.

OVARIOTOMY.

72 LAFAYETTE AVE., DETROIT, MICH.,
November 20, 1884.

TO THE EDITOR:

Dear Sir:—As a kind of a sequel to the letter which I sent you a few days ago, as well as to other articles to which that letter was related, I beg leave to submit the following condensed statement of "*facts and figures:*"

Between January 1 and October 31, 1884, (10 months) I performed exactly twelve ovariotomies. Of these, *seven* were performed in public amphitheatres, namely: *four* at Ann Arbor before at least 400 students and medical men, and *three* at Harper Hospital, in this city, before promiscuous gatherings of students and medical men. Of the four done at Ann Arbor *one* was a frail old lady of 68. The tumor weighed over forty-five pounds; there were many adhesions; the peritoneal cavity was open for fifty-five minutes; many ligatures were tied, and much sponging was required. She was dismissed cured in two weeks from the day of operation. *One* was a young, vigorous and hopeful patient, a married woman seven months pregnant. The great and rapidly increasing size of the tumor, from which she suffered intensely, demanded immediate operation. The operation was an easy and rapid one—the peritoneal wound was stitched up in less than fifteen minutes. Unfortunately, however, in spite of every possible precaution labor supervened within a few hours of the operation, and under the additional strain of the miscarriage the patient sank and died in about twenty-four hours. In this, as in all the cases, the anæsthetic was administered before the patient was carried to the amphitheatre. I am quite sure that in all your long list of readers, there is not more than one who is so destitute of reason as to suppose, or pretend to suppose, that the place and surroundings in which this operation was performed could or should be held responsible for the catastrophe.

When the patient awoke from the anæsthetic she found herself in a very quiet and comfortable private room, with which she was entirely satisfied, and where every attention was paid her and every precaution taken to ensure her safety.

The *third* was a large but uncomplicated tumor in a comparatively young and healthy woman. The peritoneal cavity was open less than eight minutes by the watch. She left for her home at Three Rivers two weeks from the date of operation.

The *fourth* was a case impossible to diagnose accurately before operation, and, in fact, pretty difficult to make out, even after the abdominal cavity was opened. The patient was a married woman, 24 years old, with a baby ten months old. But for her abdominal tumor, she was in very fair health.

The history of her tumor was very indefinite and unsatisfactory, but I must not dwell on that at this time. Suffice it to say here that I found the left kidney and both ovaries cystic, and I removed them, along with much of the omentum, which was adherent to the large cystic kidney. The operation lasted more than thirty minutes; many ligatures and much sponging were necessary. This patient is still in hospital, and is to all appearance completely convalescent, and in a few days will be *dismissed cured.* The three cases operated upon at Harper Hospital, Detroit, were done on June 24, July 3, and July 14, respectively. One of these was a very feeble lady, upwards of fifty years of age, who had been in delicate health for a number of years. Within three weeks after her operation she returned to her home in Rome, N. Y., cured, at least, of her ovarian disease. The other two were younger women, but both of them were very bad cases. My professional brethren who witnessed the operations unanimously declared that

they were such cases as an operator would be justified in refusing to interfere with. Both of them recovered, although one of them spent eight weeks in the hospital. In both of these cases, the peritoneal cavity was during the operation, flooded with cyst fluids. But over and above these seven cases operated upon in public amphitheatres, I have five to record which were done in "cottages by the wayside," or at least at the homes of the patients.

Of these two were done on Jan, 17, in the city of Kalamazoo. Of these two one was a very simple and favorable case in a young lady of eighteen. The other was a very different kind of a case. The patient was a married woman aged 44; her tumor was very large, multilocular and extensively adherent. The patient was greatly emaciated, her strength was nearly exhausted and her spirits entirely so; her feet and legs were much swollen, her digestive organs greatly debilitated and irritated, and she used morphia to the extent of eight to ten grains daily. Last but not least, her home and surroundings were just about the exact reverse of what they ought to have been from a surgical standpoint. Both of these cases recovered with most gratifying rapidity. Of the three remaining cases one was done Aug. 29, at Midland City; the patient was about sixty years old and rather frail, her tumor was large and growing rapidly. The operation was a long and tedious one, owing to the presence of a mass of adhesion which resembled an enormous diaphragm which bound the tumor to the right side of the abdominal as well as the pelvic wall. It was short, very thick and extremely vascular. I took the utmost pains to guard against hæmorrhage from this peculiar structure, but there seems reason to suspect that in this I was not entirely successful.

At any rate, for twenty-four hours all went well, temperature about normal; pulse 100. No pain and no nausea,—in short, no bad symptom of any kind; but at the end of that time rapid and painless sinking supervened and she died. No post-mortem could be had, and therefore the precise cause of death is matter of surmise. Her home was a very quiet and comfortable one, and she had every possible advantage in the way of nursing and medical attendance after her operation. Two of the dozen cases still remain to be described. Of these one occurred at the village of Otisville, Mich., Oct. 16.

This patient was a married woman sixty-three years old, who had been tapped several times. She was nearly worn out mentally as well as physically. Her lower extremities were much swollen. Her tumor was very large. It weighed nearly forty-five pounds and several of the largest cysts were filled with pus and other inflammatory products.

The peritoneal cavity was open for nearly an hour. I had not enjoyed the privilege of seeing this case before the day of operation, and then my time was limited to two hours. I have not seen her since, but have the authority of her medical attendant, Dr. J. B. Laing, of Otisville, that she is now in good health. As to the surroundings of this patient, I can sum the matter up in a word: *They were in all respects as unfavorable as it is possible to imagine.*

The last of this dozen cases occurred at Manchester, Mich., on Oct. 31. The patient was a married woman, æt. 39. She had been exposed to extreme hardships for a year or two, to which she attributed the inception of her tumor.

The latter had grown within a year. She had been tapped several times. She was nearly exhausted, but still hopeful and determined upon having an operation. I never saw this patient until the day of operation and I have not seen her since. When I did see her she was "*a sight to behold*," so great was her abdominal enlargement. She measured seventy-three inches in circumference and she was unable to stand on her feet, or to lie on her back, or to turn over in bed.

Her surroundings were in all respects, if possible, *worse* than those of the preceding case. To have removed her, however, to any better place was, by the time I saw her, a physical impossibility even if she could have been induced to consent, which I don't think she could. The tumor with its contained semi-solid material, together with the ascitic fluid present, weighed *one hundred and three pounds*. She made a perfect and rapid recovery.

To recapitulate: In the current year up to October 31, twelve women have petitioned me to relieve them of ovarian tumors, and to do so, I had to operate either in the public clinic or at their own homes. *In every case I have consented. I have refused no one.* Of these twelve cases, seven were done in public amphitheatres, with six recoveries and one death, while five were done in their own homes, with four recoveries and one death.

No doubt a more skillful operator might have saved these two patients. *Possibly* (*but in my opinion not probably*) more favorable surroundings might have made all the difference. If it had been in my power I would most gladly have availed myself of the advantages of an "ideal" hospital; not only so, but I would gladly have procured for these poor women the services of a more skillful and better equipped surgeon. Unfortunately, neither of these very desirable advantages were within the reach of my patients. I had no choice but to operate myself, and when I did. I did the best I could under the circumstances, and I succeeded in saving *ten out of twelve of them.* My conscience tells me that I did what was right in the premises, and my common sense tells me that no more cruel and cold-blooded doctrine has ever been promulgated in the name of science than the one which would have compelled me to say to these poor suffering women, "You must die in your misery, lest my rate of mortality as an ovariotomist might be increased."

Yours, etc.,

DONALD MACLEAN.

A NEW RECTAL SPECULUM.

BY O. ONEAL, M.D., WABASH, IND.

Finding the ordinary anal speculum so unsatisfactory, I have devised the one here represented, and which I find to admirably meet the objects I had in view. The blades are three and three-quarter inches

long, and can be dilated at the points by means of the screw. When closed, the instrument is round the entire length, the diameter at the outlet is one inch. Each blade has a slot three-fifths of an inch wide, and two and three-quarter inches long. These are closed by perfect fitting slides.

It is introduced closed, then by withdrawing one slide at a time the walls of the lower part of the rectum can be inspected. Wishing to examine higher up you can do so by means of the screw. This dilates the points of the blades, while the outlet

remains about the same. The advantage claimed for this speculum is that the smallest part of the mucous membrane can be exposed to the exclusion of all other parts. Wishing to operate upon a certain hæmorrhoidal tumor or an ulcer, the speculum is introduced so that one of the slides is directly over the tumor or ulcer, the slide is then withdrawn sufficiently to expose the part to be operated upon. All other parts are excluded.

In the injection of hæmorrhoids it is especially useful. After locating the tumor to be operated upon, the instrument is introduced with one slide over the part. Then slowly withdraw the slide until its end is about the centre of the tumor, and then introduce the hypodermic needle and inject the medicine. Then replace the slide and remove the speculum. The pain is much less than when they are injected while protruded and grasped by the sphincter.

The speculum is made and for sale by Tiemann & Co., New York.

BOOK REVIEWS.

TRANSACTIONS OF THE MICHIGAN STATE MEDICAL SOCIETY FOR THE YEAR 1884. Paper. 626 pages.

The proceedings of the Society present little that is of general interest. The following extracts are from the publications:

Dr. Donald Maclean has in several cases successfully treated Colle's fracture according to the following principles: 1. That Colle's fracture is always complicated with severe sprain of the wrist joint. 2. That the fracture in the great majority of cases is easily reduced by forced extension of the hand on the forearm, thereby relaxing the tense posterior aponeurosis, and permitting of the lower fragment being pushed down into its natural relation to the upper fragment. 3. That when once replaced there is little, if any, tendency to redisplacement of this fracture. 4. That mechanical restraints, such as splints, are unnecessary, and therefore should not be used. 5. That the evil results which tend to flow from a bad sprain of the wrist are the chief dangers to be provided for in the after treatment. 6. This is best accomplished by constant passive movements, frictions, etc. The reader credits the above to a monograph by Dr. L. S. Pilcher.

According to Dr. Charles G. Lundy the advantages offered by the dry treatment of chronic suppurative otitis media seem to be: 1. The constant medication of the parts. 2. The continuous disinfection of the parts, and the destruction of micro-organisms. 3. The absorption of the discharges. 4. Protection from atmospheric influences.

In cases of prostatic hypertrophy and urinary obstruction Dr. A. B. Palmer recommended dilatation by hydrostatic pressure. It is effected thus: The urethra is compressed between the thumb and finger of the patient near the glands. It is then filled with urine, and by straining as in an attempt to forcibly empty the bladder the distension of the urethra is produced.

The distending pressure, if daily repeated at an early period of obstruction, will overcome this form of stricture effectually and without irritation.

Dr. Charles Shepard reports two cases of congenital absence of vagina and uterus where the health of the patient was improved and she was enabled to marry by the production of an artificial vagina.

This was accomplished by an incision between the labia and the separation of the cellular tissue between the rectum and bladder to the depth of four inches.

This opening was kept from occlusion by the use of a sound which was worn for several weeks. After recovery from the operation there was found to be a monthly discharge from the mucous membrane of these cavities. C. E. W.

OSTEOTOMY AND OSTEOCLASIS FOR DEFORMITIES OF THE LOWER EXTREMITIES. By CHARLES T. POORE, M.D., Surgeon to St. Mary's Hospital for Children, New York, etc. New York: Appletons. 1884. Received from Jansen, McClurg & Co., Chicago. Pp. 187.

The need of established precepts is nowhere more felt at present than in the practice of the common operation of osteotomy. This book amounts to a treatise on the subject, and a full and complete one, though not as carefully compiled as could be desired.

The only other especial work on this subject in English with which it can be compared, is that of MacEwen, and to this it is much inferior in point of careful preparation and originality, but superior in being more recent. Some improvements which the author has devised in instruments and methods are of undoubted value, and he has been a constant worker in this field. The style of the work is forcible, because clear and exhaustive—nevertheless, it detracts from the merits of such a book to find in it minor blemishes and inaccuracies, of which a cursory reading will reveal a number.

As a sample of the unimportant but provoking inconsistencies which too often appear in carelessly written books, we quote two passages:

FROM P. 13.

"There was also at this time another revolution taking place in surgical practice, which has contributed more to its advance within the last ten years than any one circumstance, and this was the method of the treatment of wounds advocated by Mr. Lister. * * *

"That osteotomy has obtained its place as a safe and justifiable procedure, is due to the influence of Listerism."

FROM P. 19.

"With regard to Listerism, I am clearly of the opinion that it affords no additional safety, and I have long since abandoned it."

With the author's mental keenness, he could doubtless harmonize satisfactorily these two seemingly discordant opinions; but we submit that it is unkind to expect this of the average reader's intellect, for he omits to inform us at what stage of development the operator acquires such marvelous skill that he becomes independent of a method of procedure which only a short time before was the sole cause "that osteotomy had obtained its place as a safe and *justifiable* procedure." Herein lies a great mystery.

E. W. A.

TRANSACTIONS OF THE TEXAS STATE MEDICAL ASSOCIATION. Sixteenth Annual Session. Paper. Pp. 246.

The majority of the papers contributed to this publication are short and practical.

Dr. R. P. Talley has found the hypodermic use of bimuriate of quinine and urea very beneficial, particularly in pernicious malarial fever. To avoid abscess he injects deeply, slowly emptying the syringe as the needle is withdrawn.

Dr. C. W. Trueheart reports an interesting case of the "reproduction of two and three-quarter inches of the clavicle in the human subject by grafting with periosteum and with thin laminæ of bone covered by its periosteum, taken from the dog."

One gentleman is considerably astonished at finding pediculi on the eyelids. This is a frequent source of wonder to careless students, and they are generally considerably disgusted when they find that this species is their old acquaintance Pediculus pubis.

C. E. W.

MISCELLANEOUS.

COMMITTEE ON ORGANIZATION OF THE NINTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN WASHINGTON, D. C., IN 1887.

PRELIMINARY NOTICE.

The Committee on Organization of the Ninth International Medical Congresss, to be held in the United States in 1877, met in Washington, D. C., on November 29, 1884, for the determination of the general plan of the Congress, the election of Officers of the Committee, who will be nominated to fill the same offices in the Congress, and the consideration of questions of finance.

The following rules were adopted:

1. The Congress will be composed of members of the regular medical profession who shall have inscribed their names on the Register of the Congress, and shall have taken out their tickets of admission. As regards foreign members, the above conditions are the only ones which it seems, at present, expedient to impose.

The American members of the Congress shall be appointed by the American Medical Association, by regularly organized State and local medical societies, and also by such general organizations relating to special departments and purposes, as the American Academy of Medicine, the American Surgical Association, the American Gynæcological, Ophthalmological, Otological, Laryngological, Neurological, and Dermatological Societies, and the American Public Health Association; each of the foregoing Societies being entitled to appoint one delegate for every ten of their membership.

The members of all special and subordinate Committees, appointed by the General Committee, shall also be entitled to membership in the Congress, together with such other persons as may be specially designated by the Executive Committee.

All Societies entitled to representation are requested to elect their Delegates at their last regular meeting preceding the meeting of the Congress, and to furnish the Secretary-General with a certified list of the Delegates so appointed.

2. The work of the Congress is divided into eighteen Sections, as follows, viz:

1. Medical Education, Legislation and Registration, including methods of teaching and buildings, apparatus, etc., connected therewith.
2. Anatomy.
3. Physiology.
4. Pathology.
5. Medicine.
6. Surgery.
7. Obstetrics.
8. Gynæcology.
9. Ophthalmology.
10. Otology.
11. Dermatology and Syphilis.
12. Nervous Diseases and Psychiatry.
13. Laryngology.
14. Public and International Hygiene.
15. Collective Investigation, Nomenclature, and Vital Statistics.
16. Military and Naval Surgery and Medicine.
17. Experimental Therapeutics and Pharmacology.
18. Diseases of Children.

3. The General Meetings will be reserved for the transaction of the general business of the Congress

and for addresses or communications of scientific interest more general than those given in the Sections.

4. Questions which have been agreed upon for discussion in the Sections shall be introduced by members previously nominated by the Officers of the Section. The members who open discussions shall present a statement of the conclusions which they have formed as a basis for debate.

5. Notices of papers to be read in any one of the Sections, together with abstracts of the same, must be sent to the Secretary of that Section before April 30, 1887. These abstracts will be regarded as strictly confidential communications, and will not be published until the meeting of the Congress. Papers relating to questions not included in the list of subjects suggested by the Officers of the various Sections will be received. Any member, after April 30, wishing to bring forward a subject not upon the programme, must give notice of his intention to the Secretary-General at least twenty-one days before the opening of the Congress. The Officers of each Section shall decide as to the acceptance of any communication offered to their Section, and shall fix the time of its presentation. No communication will be received which has been already published or read before a Society.

6. All addresses and papers, read either at General Meetings or in the Sections, are to be immediately handed to the Secretaries. The Executive Committee, after the conclusion of the Congress, shall proceed with the publication of the Transactions, and shall have full power to decide which papers shall be published, and whether in whole or in part.

7. The official languages are English, French and German.

No speaker shall be allowed more than ten minutes, with the exception of readers of papers and those who introduce debates, who may occupy twenty minutes.

8. The Rules, Programmes, and Abstracts of Papers will be published in English, French, and German.

Each paper or address will appear in the Transactions in the language in which it was delivered by the author. The debates will be printed in English.

9. The Officers of the General Committee on Organization are a President, three (3) Vice-Presidents, a Secretary-General, and a Treasurer, and those elected to these positions will be nominated by the General Committee to hold the same offices in the Congress. All vacancies in these offices shall be filled by election.

10. There shall be an Executive Committee, to be composed of the President, Secretary-General, and Treasurer of the General Committee, and of four other members to be elected by the General Committee. The duties of the Executive Committee shall be to carry out the directions of the General Committee; to authorize such expenditures as may be necessary, and to act for the General Committee during the intervals of its sessions, reporting such action at the next meeting of the General Committee.

11. There shall be a Standing Committee on Finance, composed of five members, to be appointed by the President, subject to the approval of the Executive Committee.

12. Those who are elected as Chairmen of the several Sections shall be thereby constituted members of the General Committee.

The Officers elected are as follows:

President.—Dr. Austin Flint, Sr., of New York.

Vice-Presidents.—Dr. Alfred Stillé, of Philadelphia; Dr. Henry I. Bowditch, of Boston; Dr. R. P. Howard, of Montreal, Canada.

Secretary-General. — Dr. J. S. Billings, U. S. Army.

Treasurer.—Dr. J. M. Browne, U. S. Navy.

Members of the Executive Committee (in addition to the President, Secretary-General, and Treasurer). —Dr. I. Minis Hays, of Philadelphia; Dr. A. Jacobi, of New York; Dr. Christopher Johnston, of Baltimore; Dr. S. C. Busey, of Washington.

The Executive Committee will proceed at once to complete the work of organization.

J. S. BILLINGS,
Secretary-General.

WASHINGTON, D. C., *Dec* 1, 1884.

OFFICIAL NOTICE.

ANNUAL DUES from members of the Association—*Five Dollars* per annum—are payable directly to the Treasurer. Such payment entitles them to receive the JOURNAL of the Association for one year.

SUBSCRIPTIONS TO THE JOURNAL from those who are not members should be forwarded to the office of publiication, Chicago.

BACK VOLUMES OF THE TRANSACTIONS may be procured, at reduced rates, by addressing the Treasurer.

THE INDEX to the 33 Volumes of Transactions will be forwarded, postpaid, on receipt of *One Dollar* by the Treasurer.

According to a resolution passed May 9, 1884, at the Washington meeting, continuous payment of Annual Dues is required. to retain permanent membership.

RICHARD J. DUNGLISON, M.D.,
Treasurer.

Lock Box 1274, Philadelphia, Pa.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, UNITED STATES ARMY, FROM NOVEMBER 29, 1884, TO DECEMBER 5, 1884.

Gray, Chas. C., Major and Surgeon, (retired) died at Geneva, N. Y., Nov. 26, 1884.)

Kneedles. Wm. L., First Lieutenant and Assistant-Surgeon, relieved from duty at Ft. A. Lincoln, D. T., and ordered to Camp Poplar River, M. T. (S. O. 140, Dept. Dak., Nov. 25, 1884.)

Pilcher, Jas. E., First Lieutenant and Assistant-Surgeon, to be relieved from duty at Camp Poplar River, M. T., and ordered to Ft. A. Lincoln, D. T. (S. O. 140, Dept. Dak. Nov. 25, 1884.)

McCaw, W. D., First Lieutenant and Assistant-Surgeon, relieved from duty at Ft. Wingate, N. M., and ordered to Ft. Lyon, Col. (S. O. 228, Dept. Mo, Nov. 26, 1884.)